# WILLIAM W. MOMYER: A BIOGRAPHY OF AN AIRPOWER MIND

BY COLONEL CASE A. CUNNINGHAM, USAF

A DISSERTATION PRESENTED TO THE FACULTY OF THE SCHOOL OF ADVANCED AIR AND SPACE STUDIES FOR COMPLETION OF GRADUATION REQUIREMENTS

SCHOOL OF ADVANCED AIR AND SPACE STUDIES
AIR UNIVERSITY
MAXWELL AIR FORCE BASE, ALABAMA
JUNE 2013

# APPROVAL

The undersigned certify that research, argumentation, and	this dissertation meets doctorate-level standards of d expression.
DR. TOM HUGHES	
DR. JOHN T. LASAINE	
DR. JOHN OLSEN	

# DISCLAIMER

The conclusions and opinions expressed in this document are those of the author. They do not reflect the official position of the US Government, Department of Defense, the United States Air Force, or Air University.

#### ABOUT THE AUTHOR

Colonel Case A. Cunningham received his commission from the United States Air Force Academy in 1994. He attended Specialized Undergraduate Pilot Training at Reese Air Force Base, Texas and initial F-15C training at Tyndall Air Force Base, Florida. Colonel Cunningham was then assigned to Elmendorf Air Force Base, Alaska. In 1999, and en route to an assignment at Langley Air Force Base, Colonel Cunningham attended the United States Air Force Weapons School (USAFWS). After graduation, he became the weapons officer and later a flight commander in the 27th Fighter Squadron. From Langley, Colonel Cunningham traveled to Nellis Air Force Base, Nevada where he served as an instructor pilot, AIM-120 AMRAAM instructor, and assistant director of operations in the F-15C Division (later 433rd Weapons Squadron) of the USAFWS. In 2005, Colonel Cunningham served as the Aide de Camp to the Air Warfare Center Commander, Nellis Air Force Base, Nevada, while continuing to perform flight instructor duties at the USAFWS. After attending the Air Force Institute of Technology and the School of Advanced Air and Space Studies, Colonel Cunningham served as the Director of Operations in the Air Force's only F-22 formal training unit at Tyndall Air Force Base, Florida. Following that assignment, he was selected as the Commander and Leader of the United States Air Force Air Demonstration Squadron, the Thunderbirds. He served for two years commanding the 130 person squadron and piloting the lead aircraft in demonstrations across the globe before being selected as an Air University Lorenz Fellow for the completion of a PhD in Military Strategy.

Colonel Cunningham earned a Master of Arts in National Security Studies from American Military University and a Master of Science in Strategic Leadership from the Air Force Institute of Technology in 2006. In 2007, Colonel Cunningham was awarded a Master of Airpower Art and Science from the School of Advanced Air and Space Studies. Colonel Cunningham has participated in Operations SOUTHERN WATCH, NORTHERN WATCH, NOBLE EAGLE, ENDURING FREEDOM, and numerous joint and coalition airpower exercises. He is a command pilot with more than 3,000 hours in the F-15, F-22, F-16, and MC-12W. Col Cunningham is currently assigned as the Vice Commander, 451st Air Expeditionary Wing, Kandahar Airfield, Afghanistan, an organization with a multi-role mission to provide persistent and powerful airpower presence in the Afghanistan area of operations. The wing consists of four expeditionary groups providing tactical airlift, close air support, intelligence, surveillance and reconnaissance, command and control, airborne datalink, combat search and rescue, casualty and aeromedical evacuation, aerial-port and all associated critical support capabilities.

#### **ACKNOWLEDGEMENTS**

This project could not have come to fruition without the efforts and assistance of a number of selfless individuals. I am particularly thankful to my committee and especially to Dr. Tom Hughes, the head of my committee and dissertation advisor, who spent countless hours of his own time coaching me through the completion of this mission. His patience, wisdom, guidance, and friendship were invaluable. Dr. John LaSaine was instrumental not only in the genesis of this project as my thesis advisor six years ago at SAASS, but also in its completion as a member of the committee. Dr. John Olsen challenged me in the creation of a chapter on Momyer for a book he was editing on airpower leaders while I worked toward the goal of completing the dissertation. His thoughts and guidance during that process contributed greatly to the final version of the dissertation appearing in these pages.

I also owe a great deal of thanks to Air University and to the military and civilian leadership and staff of SAASS. The flexibility provided me during this process created opportunity from the challenges of working on the dissertation while I served in other professional capacities. The abbreviation of the originally intended dedicated period to work on this venture allowed me to grow as an officer but also added perspective to the study as I completed the writing during my few free hours each week while I served in combat in Afghanistan.

Dave and Ann Schlachter, my wife's parents, selflessly took on the role of secondary parents as well as grandparents to our two wonderful children as my wife tackled the challenges of a full time profession as an attorney and I spent incalculable hours writing, months away from home researching and training, and ultimately a year in Afghanistan during the course of the project. I am so thankful for their love and support of our family. My parents, Gary and Dana Cunningham, provided the foundations for success long ago and the loss of my mother in 2011 drove that fact home even more. Even though she is no longer with us, I can still feel her love and her pride in this accomplishment.

Most importantly, I owe my sincerest thanks to my incredible family. From the start of 2010 and the demanding travelling schedule as the commander of the Thunderbirds, to the research trips and military training before my combat deployment, to the return from Afghanistan in July of 2013, I will have been away from them for roughly 70% of the last 3.5 years during the completion of this dissertation. While it may pale to the sacrifices other military families face, I believe my family has truly and nobly sacrificed for my service. My children took on many additional responsibilities to meet the challenges of my long absences and I am so proud of their strength. And most of all, to my wife, the love of my life who so steadfastly stands as the bedrock upon which our family is built – thank you for the gift of you and the privilege of travelling through life with a woman of such stunning beauty and amazing strength.

#### **ABSTRACT**

General William Momyer's 35 years of service to the nation spanned three major wars: World War II, Korea, and Vietnam. During this career, Momyer developed into the intellectual and operational leader of the second generation of American Airmen. Despite his impact and accomplishments, he remains the most forgotten of America's greatest Airpower leaders. This dissertation brings Momyer from the shadows and tells the story of one of the Air Force's greatest minds for airpower.

Momyer began his career flying P-40s in the Western Desert of Africa with the RAF and later led one of the Army Air Forces finest P-40 fighter groups through combat operations that began with Operation TORCH, followed the Allied advanced through North Africa and Sicily, and ended shortly after the Allied forces made their way onto the boot of Italy. Momyer returned to the states to serve on the Army Air Force Board, a prime organization involved in putting the lessons of World War II together with equipment testing, tactics, and doctrine. His following tours on the Tactical Air Command (TAC) staff were in Plans, the organization responsible not only for war plans, but for forging doctrine and planning joint exercises. He served a tour on the Air War College faculty as the Director of the Evaluation Division and, during the war in Korea, led the production of the first complete set of Air Force doctrine manuals. After a year at National War College and a number of important commands, Momyer's tour on the Air Staff in Requirements put him in the midst of planning for the means that would serve the ends of future wars.

The most significant aspect of Momyer's career is that all of his prior experience and airpower intellect culminated in the opportunity to put his theory of airpower into action. As the Seventh Air Force Commander in Vietnam from 1966 –1968, Momyer had operational control over hundreds of aircraft and thousands of sorties during the years of the United States Air Force's heaviest participation in the Vietnam War. Even after he came back to the states as the TAC Commander, Momyer remained intimately involved in the conflict in Vietnam as a large majority of TAC assets continued to operate in Southeast Asia. While fighting one war in Southeast Asia, Momyer led a command that prepared to fight another war on the plains of Europe and shaped the future, structure, and concepts of the Air Force that found impressive victories in the Persian Gulf War. After retirement, the Air Force employed Momyer for five years as he led a team that analyzed, reviewed, and wrote about the lessons of the Vietnam War. The grand finale of his professional experience was the creation of his book, *Airpower in Three Wars*.

General William W. Momyer was an Airman who spent his entire career in the pursuit of the most effective application of airpower's means to the ends of war. This is the story of Momyer's theory of airpower as it developed through his experiences, as it emerged from what he wrote in correspondence, reports, studies, and in his book, and as it played out on the battlefields and in the skies of Southeast Asia.

# CONTENTS

Chap	Chapter	
	DISCLAIMER	i
	ABOUT THE AUTHOR	ii
	ACKNOWLEDGEMENTS	iii
	ABSTRACT	iv
	INTRODUCTION	1
1	THE OKIE FROM MUSKOGEE	6
2	PURSUIT PILOT	15
3	FORMATIVE CAMPAIGN	28
4	ON TO ITALY	54
5	IN PURSUIT OF DOCTRINE	80
6	THE SCHOOL YEARS	101
7	COMMAND AND STAFF	125
8	A THEATER AMISS	156
9	OPENING ACT	174
10	ATTLEBORO	192
11	HANOI	215
12	THE SPOKESMAN AND AIR SUPERIORITY	254
13	THE QUEST FOR SINGLE MANAGEMENT	291
14	THE END AND THE BEGINNING	360
	CONCLUSION	387
	BIBLIOGRAPHY	396

#### Introduction

On September 3, 2012 the *New York Times* announced, "Gen. William W. Momyer, Celebrated Pilot, Dies at 95." The news came nearly a month after Momyer died from heart failure while in assisted care at Selah Seniorcare-Cedar Creek in Merrit Island, Florida. "In a 35-year career that spanned a revolutionary era of aerial warfare, from dogfights in P-40s against whining Messerschmitts over North Africa to the rolling thunder of supersonic fighter-bombers over the cities and jungles of Southeast Asia," the obituary read, "General Momyer (pronounced MOE-meyer) was known as a daring pilot, an aggressive wing commander and one of the best air tacticians of his time." Despite his colorful career and impressive contributions to American airpower thought and application, Momyer remains the most forgotten of America's most important Airmen.

William Wallace Momyer was the leading Airman of the second generation of American airpower leaders. By upbringing, he was a tactical Airman - a professional warrior who thought about the application of airpower in relation to the objectives of the ground campaign. Almost by his own actions, he also became the last senior airpower leader to be known as a tactical Airman. General William Momyer's thinking led the second generation of Airmen to come to see airpower as indivisible. His vision of airpower was not tactical airpower, but theater airpower. In Momyer's vision, the centralized control of airpower allowed for an orchestrated and deliberate air campaign against the enemy's ability to achieve military victory and thus defeat their will to continue fighting.

As the intellectual leader in the second generation of Airmen, Momyer was instrumental in building the bridge between the first and third generation of Airmen. The first generation of Airmen saw airpower in terms of tactical and strategic platforms. Tactical airpower meant fighters, pursuit planes, and attack aircraft supporting the ground fight. Strategic airpower meant bombers and strategic targets with the potential of war winning effects. Momyer

<sup>&</sup>lt;sup>1</sup> Robert D. McFadden, "Gen. William W. Momyer, Celebrated Pilot, Dies at 95," *New York Times*, September 3, 2012, p. A16.

envisioned airpower as indivisible and classified only by the effects it could have on the enemy. It was Momyer's lead, combined with technical advances in the machinery of airpower that provided the third generation of Airmen a foundation for the ability to wage parallel warfare against the enemy's vital systems. This generation was responsible for the impressive military victory in the Gulf War of 1991, where both the will of the enemy to fight and his ability to fight could be and were attacked simultaneously by multiple aircraft and platforms with paralyzing effect. Momyer was the last great tactical Airman because, after him, and in great part, because of him, Airmen came to believe that airpower was most effective when not separated into tactical and strategic boxes, but rather when it was united and indivisible.

This work not only aims to solidify Momyer's place in the second generation of airpower leaders, it also sets out to provide a companion to Momyer's somewhat biographical account of the development of airpower from World War II through Vietnam. In the foreword to his book, *Airpower in Three Wars*, Momyer wrote, "What I offer in this book, as fairly and as clearly as I can, is an account of the way airpower looked to me from the perspectives I think will matter most to airmen." Correspondingly, what I offer in this work is the 'why' behind the way airpower looked to Momyer and the 'how' behind the way he developed his perspectives. Thus, this study is biographical and chronological. To understand how Momyer became the most important Airmen of his generation, one must understand and assess his operational environment, his leadership style, his written works, his experiences, and the choices which shaped the newly independent Air Force between World War II and Vietnam.

The purpose of this work is not only to tell a story, but also to assess critically Momyer's contribution to the United States Air Force, airpower and warfare. To accomplish this goal, this work focuses on the analysis of Momyer's vision through leadership, his actions, and his own written word. Many of the sources used in the construction of this analysis are both official and semi-official Air Force history. Admittedly, this often brings an Air Force

<sup>&</sup>lt;sup>2</sup> General William W. Momyer, *Airpower in Three Wars* (Maxwell AFB, AL: Air University Press, 2003), xiii.

organizational bias to the work. In addition, although I have attempted to be as objective as possible in the assessment of Momyer's life and impact, my institutional biases from a nearly twenty year Air Force career also shape the perspectives contained herein. Accounts from oral histories of various senior leaders provide the picture of Momyer as a leader and commander, but are limited by the filter of personal observation. Unfortunately and despite many attempts to make contact, I was never successful in gaining an audience with the man who lived the life described in these pages. He was an increasingly and extremely private man in retirement and the lack of firsthand information from him is a limitation of this study.

Despite these limitations, the account of Momyer's career paints the picture of a serious and contemplative man. He was shaped by the experiences that challenged a young man with serious responsibilities. With responsibility came opportunity, and in many ways Momyer's timing even further magnified an opportunity to make a difference. Joining military service at the very beginning of the buildup for World War II, he was positioned for leading roles in a force that grew exponentially in a short amount of time. Through group command in World War II, airpower application thought and study as the newly independent Air Force sought to find its way in a changing national security environment, and then higher level command during the height of nuclear influence in that same force, Momyer grew to become a deliberate airpower philosopher and well respected and forceful leader as a tactical Airman in an Air Force dominated by the strategic bombing advocates characterized by the dynamic and bombastic General Curtis LeMay. As the nation became involved in Vietnam, and when American involvement there reached its apogee, there was no other Airman more qualified to take on the role of a senior operational commander in that conflict.

Although it occupied two short years of his life, Momyer's impact as the operational air commander in Vietnam from 1966-1968 receives a great deal of attention in these pages. Even the casual reader is well aware that the number of secondary sources and books on the topic of the Vietnam War number in the thousands. The number of those works specifically addressing the application of airpower in the conflict is not as grand, but still numerous. In addition to

the official and semi-official Air Force histories on the subject, Mark Clodfelter's *The Limits of Air Power: The American Bombing of North Vietnam* and Earl H. Tilford's *Crosswinds: The Air Force's Setup in Vietnam* are two of the more notable and critical assessments of airpower's role in the Vietnam conflict. These works and others place at least partial blame for failure in Vietnam on the backs of the Airmen who conducted the war. Told through the filter of Momyer's life and involvement, this work provides an original perspective on airpower's role in Vietnam. There, the complex nature of warfare was never more evident than in the interplay of the battles fought in the air, the messages and phone calls between senior operational commanders, the contemplations and deliberations of political leaders, and the tried and true efforts of the warriors who did their best to serve as their nation asked. Momyer's life experience provides a lens through which that story can be told.

This study is necessarily incomplete, as any work purporting to capture a life must be. An informed reader will note Momyer's often contentious relationship with the Air Force special operations forces in Vietnam is not addressed. General Harry C. 'Heinie' Aderholt, the commander of an air commando wing in Thailand during Momyer's time in Vietnam, was an ardent believer in the power of specialized forces to address the root of the conflict in Vietnam and an outspoken critic of Momyer's apparent lack of total support for that effort. Aderholt's biography, written by Warren Trest, provides an excellent read on the topic and good insight into the nature of the disagreement between the two men. Additionally, a completely chronological approach of Momyer's operations in Vietnam is not possible within the scope of this study. The analysis of specific situations and scenarios of Momyer's role in the conflict best illustrate the impact of Momyer's experiences and thinking on the operational commander he became in Vietnam.

Momyer's five year command of Tactical Air Command (TAC), the last of his active duty assignments before retirement, garners the least coverage by years to word count ratio of any period in Momyer's life. The historian Marshal Michel, among others, has made the case in his excellent book, *Clashes: Air Combat over North Vietnam: 1965-1972*, that Momyer's leadership of TAC was partially to blame for the lack of preparedness of Airmen in the air combat that

took place in the skies of Vietnam in 1972. Although this study neither aims nor intends to refute that argument, it does provide the complexity of the tasks Momyer faced as the man responsible for organizing, training, and equipping combat forces for the battle being fought in Vietnam as well as the potential of future conflict with the Soviet Union. In many ways, the lessons Momyer applied from combat in Vietnam were the actions that shaped the forces that would do battle in the skies over Iraq in 1991. Although command of the organization he was assigned to through much of his career was the crowning achievement of his active duty military career, he found continued employment with the Air Force in the formal assessment and recording of lessons learned from the Vietnam conflict. It was those efforts that not only shaped the way the Air Force viewed the Vietnam experience, but also provided the foundation for the construction of Airpower in Three Wars. As one of the only Airmen to lead forces in combat and write about the philosophies that inspired his actions and the lessons learned through airpower history, Momyer yet again set himself apart in the second generation of airpower leaders.

At its very core, this is a story about an Airman and his service to America. The aim is to present an original contribution to airpower history and the story of the development of one of airpower's most influential, but nearly forgotten, airpower thinkers and leaders. In the last sentence of the foreword of his book, Momyer wrote, "We mustn't rely entirely upon yesterday's ideas to fight tomorrow's wars, after all, but I hope our airmen won't pay the price in combat again for what some of us have already purchased." <sup>3</sup> These words are as true today as they were in 1978, and seem an appropriate way to begin the journey which follows: the life and times of General William Wallace Momyer, the leading Airman of the second generation of American airpower leaders.

<sup>&</sup>lt;sup>3</sup> General William W. Momyer, *Airpower in Three Wars* (Maxwell AFB, AL: Air University Press, 2003), xiii.

## Chapter 1

# The Okie from Muskogee

October 1, 1927 was like most cool, cloudy Saturdays in Muskogee, Oklahoma. On that day, the residents of Eastern Oklahoma awoke and went about their weekend routine, spending time with family and enjoying the break from the workweek pace. For one 12-year-old boy, the day was anything but ordinary. William Wallace Momyer awoke that Saturday morning with anticipation. The day promised greatness, and he badly needed such a day to let him escape, if only for a few hours, the pain of a very difficult year. That morning, the legendary Charles Lindbergh would make an appearance at Muskogee's very own Hatbox Field. At precisely 10:30 a.m., the famous aviator would swoop down on the busy airfield just south of town and address the crowd gathered to see him. He would only spend an hour on the ground before taking off again for Little Rock, Arkansas.¹ William wanted to arrive early to ensure he had a front row spot for the arrival. Lindbergh's recent solo non-stop flight from New York to Paris not only appealed to Momyer's fascination with aviation, but it also spoke loudly to his sense of adventure.²

Momyer descended from German immigrants who had set out to find new opportunities in a new world. His father, also William, was a prominent lawyer and local politician in Muskogee, Oklahoma, who at 38 had married 23 year old Gertrude Conway. On September 24, 1915, the *Muskogee Times Democrat* carried this announcement: "Mr. and Mrs. W. W. Momyer, 565 North Seventh, announce the birth of a fine son, born Thursday, September 23." Their first son would carry on the family name, William Momyer. Little could his father and mother know that one day he would wear the four stars reserved for those that hold the most responsibility in the armed services of the United States. For a young man who would spend the majority of his life studying, employing, and leading airpower, it seemed appropriate that the front page of

<sup>&</sup>lt;sup>1</sup> "Lindbergh To Be At Muskogee Saturday" *The Standard Sentinel*, September 30, 1927.

<sup>&</sup>lt;sup>2</sup> General William W. Momyer Oral History, by Lt Col John N. Dick, 31 January 1977, p. 3, K239.0512-1068, IRIS No. 1029788, AFHRA. Momyer speaks fondly of Lindbergh's visit to Muskogee – noting that he was in the crowd.

<sup>&</sup>lt;sup>3</sup> "Birth Announcement" *Muskogee Times Democrat*, September 24, 1915. Every current public source on Momyer has his birth date in 1916. It appears that much as his father before him, Momyer would go through life with age uncertainty.

the Muskogee Times Democrat on the date of William's first birthday carried reports of the action of the French aviators over the Somme as they engaged in the aerial battles of World War I. "On the Somme front, French aviators during the day engaged in a total of fifty-six aerial combats. As a result of this activity four enemy aeroplanes were destroyed while others were seen falling disabled." On the Verdun front, the paper reported, the famous French aviator and ace Adjutant Lenoir "attacked a German aeroplane at very close quarters and brought down his opponent within the German lines at a point north of Douaumont . . . the tenth enemy machine destroyed up to the present time by Adjutant Lenoir."4

William's older sister, Catherine, was three years old at the time of his birth. It was not long before the family grew once more. The Momyer's welcomed another daughter, Mary Joy, into the family in November of 1917, followed four years later by the arrival of Daniel Conway, the last of their children.<sup>5</sup> Fifteen years older than his bride, William's father was older than most fathers with younger children in Muskogee. At the time of Daniel's birth, his father was 52 years old, just two years shy of the average life expectancy for an American male.<sup>6</sup> He had lived a full life of adventure before starting a family and his first son saw him as larger than life.

The year 1921 brought into existence an airfield that greatly affected the young William Momyer. On Sunday afternoon, April 24, 1921, the Muskogee Airplane Company scheduled a show to open its new field on South Fortieth Street, just a few miles from the Momyer home.<sup>7</sup> Over 1,000 automobiles and their occupants packed the local roads on that rainy, windy day in anticipation, but the weather foiled the show.8 The following Sunday, the weather was better and a large crowd thrilled to "tall spins, loop-the-loop, falling leaves, and wingovers" performed by the stunt pilots.9 As he watched with his father, a five and a half year old William Momyer surely felt nothing less than pure excitement.

<sup>&</sup>lt;sup>4</sup> "French Airships Are Very Active" Muskogee Times Democrat, September 23, 1916

<sup>&</sup>lt;sup>5</sup> "Society and Clubs" Muskogee Times Democrat, November 27, 1917; Oregon Death Index 1931-1941, Oregon State Library, State of Oregon Death Index, 1991-2000. <sup>6</sup> Charles Lincoln Van Doren, Webster's Guide to American History (Encyclopedia

Britannica, 1971), 410.

<sup>&</sup>lt;sup>7</sup> "Open Flying Field with Aerial Stunts" *Muskogee Times Democrat*, April 21, 1921.

<sup>&</sup>lt;sup>8</sup> "Bad Weather Halts Dare Devil Fliers" Muskogee Times Democrat, April 25, 1921.

<sup>&</sup>lt;sup>9</sup> "Parachute Leap is Nearly Fatal" Muskogee Times Democrat, May 2, 1921.

He was hooked. As he recounted decades later, "I was always at the airfield, either for an air show or just to hang around." 10

Muskogee had well earned its spot in the aviation pyramid of the day. Back in 1911, Calbraith Rogers had landed the 'Vin Fizz' in Muskogee during the very first transcontinental flight across the United States. To those that were on hand as the young aviator emerged from his Wright Flyer, "there came a sensation as if they had just seen a messenger from Mars." The Creek Airplane Company first used the airfield site for a flying circus, and in 1920, a famous World War I aviator put on exhibitions in a Curtiss Jenny for a number of days. Joseph B. Witt and Martin H. Wood opened the field in 1921 and inventively called it Witt Field. The town became a favorite stopover for young airmen of the fledgling Air Service as they sought to build hours and experience in the air. It was on one of these flights near the field that one of the aviators, Captain Charles Oldfield, dubbed the field 'Hat-Box Field,' "on account of the similarity of the hangars to ladies' hat boxes, with the black and white stripes running vertically." The town became a favorite stopover for young airmen of the hangars to ladies' hat boxes, with the black and white stripes running vertically."

"My first interest in aviation was at Hatbox Field in Muskogee," Momyer later recalled. "I used to go out to the airfield, and I would climb through the De Havillands of World War I."<sup>15</sup> There were more than a few De Havillands at Hatbox during Momyer's childhood. The Air Service News Letters of the early 1920's capture account after account of aircraft stopping through Muskogee. These early aircraft often had maintenance trouble, leaving them at the field for days at a time. This gave young William an opportunity that he could not pass up. For Momyer, the flying spark really went back to "that direct exposure;

 $<sup>^{10}</sup>$  General William W. Momyer Oral History, by Lt Col John N. Dick, 31 January 1977, p. 3, K239.0512-1068, IRIS No. 1029788, AFHRA.

<sup>&</sup>lt;sup>11</sup> Fred Culick and Spencer Dunmore, *On Great White Wings: The Wright Brothers and the Race for Flight* (Hyperion, New York, 2001), 152.

<sup>&</sup>lt;sup>12</sup> "Lievre Will Drop 3,000 Feet in Air" Muskogee Times Democrat, July 7, 1920.

<sup>&</sup>lt;sup>13</sup> Wallace F. Waits, Jr. "Hatbox Field" Oklahoma Historical Society's Encyclopedia of Oklahoma History and Culture,

http://digital.library.okstate.edu/encyclopedia/entries/H/HA052.html

<sup>&</sup>lt;sup>14</sup> "Army and Navy Air News" Aviation, January 2, 1922, 669

<sup>&</sup>lt;sup>15</sup> General William W. Momyer Oral History, by Lt Col John N. Dick, 31 January 1977, p. 3, K239.0512-1068, IRIS No. 1029788, AFHRA.

climbing into the cockpits and being kicked out of the hangar and then coming back and spending time around the airplanes."<sup>16</sup>

There was more activity at the field than just 'routine' cross country arrivals and departures. In April 1924, four Douglas World Cruiser Airplanes and eight airmen left Seattle Washington in attempt to circumnavigate the world by air. In early September, they arrived back on the American continent with one less airplane and a book of adventures. They spent the remainder of September making their way back across the United States. <sup>17</sup> On September 10, officials announced "the six American army flyers who have virtually completed the first trip around the world by air, will drop down on Muskogee early next week while making the last lap of their historical flight." On September 18, just days before William's ninth birthday, he watched with 25,000 others as "the globe encirclers appeared over the haze of the north, circled the field, and landed." <sup>19</sup>

But it was not just the airfield that provided such fertile ground for the beginnings of Momyer's love for the sky. Muskogee was an 'air' town. One of the Air Service Lieutenants who stopped by the town in 1923 thanked the Muskogee Chamber of Commerce for their town's hospitality during his stay. "The people of this community want you and all Air Service men to stop over in this city when possible, even for just an hour or so," the Chamber replied. "We simply want you to know that in this city you are among friends, among citizens that believe in the wonderful possibilities of your branch of the service, and they are willing to do all possible to make your stop as pleasant as possible." 20

In 1925, Muskogee became one of three American cities to extend "all possible courtesies to visiting aviators." Each of the cities issued cards to Air Service officers, entitling them to "various privileges in the matter of hotel accommodations, café service and amusements." The introduction on the Muskogee card read, "The heart of Muskogee is in the promotion and

<sup>&</sup>lt;sup>16</sup> General William W. Momyer Oral History, by Lt Col John N. Dick, 31 January 1977, p. 3, K239.0512-1068, IRIS No. 1029788, AFHRA.

<sup>&</sup>lt;sup>17</sup> "First Round the World Flight," National Museum of the Air Force, http://www.nationalmuseum.af.mil/factsheets/factsheet.asp?id=751

<sup>&</sup>lt;sup>18</sup> "World Flyers to Pass Over Eufala" *Indian Journal*, September 11, 1924.

<sup>&</sup>lt;sup>19</sup> "Fliers Given Royal Greeting in Oklahoma" *The Perry Journal*, September 19, 1924.

<sup>&</sup>lt;sup>20</sup> "Air Service News Letter," Information Division Air Service, July 10, 1923, p. 21.

encouragement of the United States Air Service. The entire citizenship holds the highest respect for the officers and enlisted men. In no community do they stand in higher esteem." One young Air Service officer who recognized the special aviation environment of Muskogee was Lieutenant A. C. Strickland. "Muskogee is a pioneer in the aviation field," he said to a crowd gathered for the Muskogee Aviation Club, "Everywhere you go throughout the United States, Muskogee is known as a city awake in the possibilities of aviation." Strickland became the Executive Officer of the Organized Reserve Air Units at Hatbox in early 1925. Momyer got to know him well in his frequent trips to the field. Shortly after leaving Hatbox, Strickland piloted one of the refueling aircraft which famously kept another aircraft dubbed the 'Question Mark,' aloft for 150 hours and 40 minutes. One of the men at the controls of the 'Question Mark' was Lieutenant Elwood Quesada. Both Strickland and Quesada were destined to help shape Momyer's course in life. 23

The status of the aviators in Muskogee left an indelible mark on Momyer's psyche. Not only was flight exciting, but it led to recognition and privilege. Growing up around the young aviators in Muskogee also put a different kind of fire in Momyer. "From the time I was a small kid in the neighborhood," Momyer remembered, "I was always involved in fistfights." As much as he tried, "I could never get away from them. I did not always win, but I was always in the middle of them." This competitiveness translated to every aspect of Momyer's young life. Whether it was football, track, basketball, swimming, or horseshoes, Momyer "had that driving determination that I could do it better than the other guy." Momyer was not, by any stretch, one of the biggest nor most athletic kids in Muskogee, but fight was in his heart.

On February 24, 1927, just eight months before the famed Lindbergh would visit Muskogee, the head of the family and William's beloved father, Mr.

<sup>&</sup>lt;sup>21</sup> "Army Air Service News Letter," Information Division Air Service, July 8, 1925, p. 10. <sup>22</sup> "Aviation Aides Set 500 Members as Initial Goal" *Muskogee Times Democrat*, February 26, 1925.

<sup>&</sup>lt;sup>23</sup> Airlift / Tanker Association, "Hall of Fame,"

http://www.atalink.org/HallOfFame/Members/AR\_Pioneers.aspx.

 <sup>&</sup>lt;sup>24</sup> General William W. Momyer Oral History, by Lt Col John N. Dick, 31 January 1977,
 p. 5, K239.0512-1068, IRIS No. 1029788, AFHRA.

<sup>&</sup>lt;sup>25</sup> General William W. Momyer Oral History, by Lt Col John N. Dick, 31 January 1977, p. 6, K239.0512-1068, IRIS No. 1029788, AFHRA.

William Momyer, nearly 60, passed away suddenly from a hemorrhage.<sup>26</sup> The death sent a shock through what was still a young family. Catherine, the oldest at 14, was just beginning to find her own niche as a musical prodigy. William's younger siblings, Mary Joy (9) and Daniel (5), lost the impact of a strong father figure. Although he had learned so much from his father in his first 11 years, William would pass through his formative adolescent years without his influence and love. The impact on young William was palpable. Years later, when an interviewer asked Momyer how old he was at the time of his father's death, Momyer responded incorrectly, but without hesitation - 14 years old. The amount of maturation his father's death required had a profound impact even on how old he felt during this difficult time.<sup>27</sup>

Mrs. Momyer reeled from the shock of losing her husband at a time when few social structures existed to save the family from a descent into a hardscrabble life. She fell for Maurice Moxley, a drifter who passed through Muskogee not long after her husband's death. He was a blue eyed, gray haired Army veteran of dark complexion who rode the rails from town to town. <sup>28</sup> Born in 1884 in Brooklyn, New York, Maurice had served briefly in the Army during World War I and again from 1920 to 1924. <sup>29</sup> For the next few years, Maurice bounced in and out of Homes for Disabled Soldiers, mostly in the American west, and eventually landed in Muskogee about the time William Momyer passed away.<sup>30</sup>

-

<sup>&</sup>lt;sup>26</sup> Cemetery records,

http://www.usgennet.org/usa/ok/county/muskogee/cemeteries/greenhill/mnames.pd f

 <sup>&</sup>lt;sup>27</sup> General William W. Momyer Oral History, by Lt Col John N. Dick, 31 January 1977,
 p. 5, K239.0512-1068, IRIS No. 1029788, AFHRA.

<sup>&</sup>lt;sup>28</sup> Ancestry.com. *U.S. National Homes for Disabled Volunteer Soldiers*, *1866-1938* [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2007. Original data: Historical Register of National Homes for Disabled Volunteer Soldiers, 1866-1938; (National Archives Microfilm Publication M1749, 282 rolls); Records of the Department of Veterans Affairs, Record Group 15; National Archives, Washington, D.C.

Year: 1910; Census Place: Brooklyn Ward 29, Kings, New York; Roll: T624\_982;
 Page: 14B; Enumeration District: 0933; Image: 952; FHL Number: 1374995.
 Ancestry.com. 1910 United States Federal Census [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2006.

<sup>&</sup>lt;sup>30</sup> Ancestry.com. *U.S. National Homes for Disabled Volunteer Soldiers*, 1866-1938 [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2007. Original data: Historical Register of National Homes for Disabled Volunteer Soldiers, 1866-1938; (National Archives Microfilm Publication M1749, 282 rolls); Records of the Department of Veterans Affairs, Record Group 15; National Archives, Washington, D.C.

In August 1929, just over two years after the death of the elder Momyer, Maurice Moxley and Gertrude married.<sup>31</sup> Sticking to his nomadic ways, Maurice moved Gertrude to Washington, breaking up the family. Seventeen year-old Catherine moved to Tulsa to live with Gertrude's sister; Mary Joy, 12, moved to Oklahoma City to live with another aunt and uncle on Gertrude's side of the family, and William and Daniel moved to Seattle, Washington with their mother and Maurice.<sup>32</sup> William was almost 15. His father's death had turned the family upside down. In 1930, William found himself in a new state with his brother, his mother, who now identified herself as a Christian Science Practitioner, and a disabled drifter who now called himself an interior decorator.<sup>33</sup>

William made the most of the situation. To fend for himself and provide for his family, Momyer took on a job as a paper delivery boy for the *Seattle Times*. His district manager called him "one of the most reliable carriersalesmen we've ever had."<sup>34</sup> Momyer, he said, "was 'on his toes' all the time; he whipped in and out of that station in less time than you'd think it would take to load up for his route." As the manager remembered, "Everybody liked Bill . . . He had every carrier's chance for leadership and he made the most of it."<sup>35</sup>

William attended Broadway High School in Seattle and balanced his time with his newspaper job and sports. Although Momyer later remembered, "when I went to high school, I had to work so the athletics kind of went by went by the

 $<sup>^{31}</sup>$  http://www1.odcr.com/detail.php? Case=051-MLI%203100309& County=051- from on demand court records on the web

<sup>&</sup>lt;sup>32</sup> Year: *1930*; Census

Place: *Tulsa*, *Tulsa*, *Oklahoma*; Roll: 4661251; Page: 8A; Image: 430.0; Family History Library Film: 2341669. Ancestry.com. 1930 United States Federal Census [database online]. Provo, UT, USA: Ancestry.com Operations Inc, 2002; Year: 1930; Census Place: Oklahoma City, Oklahoma, Oklahoma; Roll: 4661234; Page: 13A; Image: 884.0; Family History Library Film: 2341652. Ancestry.com. 1930 United States Federal Census [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2002;

Year: 1930; Census Place: Seattle, King, Washington; Roll: 4547449; Page: 13A; Image: 420.0; Family History Library Film: 2342232. Ancestry.com. 1930 United States Federal Census [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2002. <sup>33</sup> Year: 1930; Census Place: Brooklyn (Districts 501-750), Kings, New

York; Roll: 4638814; Page: 11B; Image: 406.0; Family History Library Film: 2341263. Ancestry.com. 1930 United States Federal Census [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc. 2002.

<sup>&</sup>lt;sup>34</sup> "Ace War Flyer Was Ace Carrier for the Times" *Seattle Sunday Times*, June 13, 1943. <sup>35</sup> "Ace War Flyer Was Ace Carrier for the Times" *Seattle Sunday Times*, June 13, 1943.

board,"<sup>36</sup> he remained competitive in sports. Among other things, he competed in track, namely shot put and pole vault.<sup>37</sup> In June of 1933, Momyer graduated.<sup>38</sup> Not long after, Maurice quickly left the town and what was left of the Momyer family. Gertrude and the boys did not hear from him again, and by September, he was back to his drifting ways and incarcerated in Reno, Nevada on charges of writing bad checks.<sup>39</sup>

In the fall of 1933, Momyer started college at the University of Washington, at first keeping his newspaper route to help pay bills.<sup>40</sup> To his mother's surprise, at the end of his sophomore year, on June 15, 1935, Momyer married Marguerite C. Wilson. The two began married life at the King County Courthouse on Third Avenue in Downtown Seattle. They made a handsome couple. Pat, as she was known to most, was a year and a half older than her husband and a striking woman. An artist and talented pianist originally from Salt Lake City, Pat absolutely floored William, and their union would stand the test of time and separation.<sup>41</sup>

Just shy of twenty years old, Momyer had married four years earlier than the national average of the time. He was young, but he had the discipline to continue his studies at the University of Washington, a task that grew again in challenge when, on February 8th, 1936, William and Pat welcomed the light of their lives into the world: Jean Momyer, often called Billie Jean by those who knew her best, was the first and only child for the Momyer family. For William, a beautiful baby girl grabbed hold of his heart as only a daughter can capture the heart of her father. It was a special bond that began then, and lasted for many, many years to follow.<sup>42</sup> The untimely death of his father, a young

<sup>&</sup>lt;sup>36</sup> General William W. Momyer Oral History, by Lt Col John N. Dick, 31 January 1977, p. 5, K239.0512-1068, IRIS No. 1029788, AFHRA.

<sup>&</sup>lt;sup>37</sup> "Tigers Worried While Planning Track Program" Seattle Daily Times, April 13, 1932.

<sup>&</sup>lt;sup>38</sup> "Seattle High Schools Graduate 3,700" Seattle Daily Times, June 14, 1933.

<sup>&</sup>lt;sup>39</sup> "Goes to Jail for Bad Check" Reno Evening Gazette, September 27, 1933.

<sup>&</sup>lt;sup>40</sup> "Ace War Flyer Was Ace Carrier for the Times" Seattle Sunday Times, June 13, 1943.

<sup>&</sup>lt;sup>41</sup> Washington State Digital Archives, Washington Marriage Record, http://media.digitalarchives.wa.gov/WA Media/ineg/F2BBCDA912

http://media.digitalarchives.wa.gov/WA.Media/jpeg/F2BBCDA912EF7BC5C8248196CFF5ACE1\_1.jpg

<sup>&</sup>lt;sup>42</sup> Voter Registration Lists, Public Record Filings, Historical Residential Records, and Other Household Database Listings, Ancestry.com. U.S. Public Records Index, Volume 2 [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2010. Voter Registration Lists, Public Record Filings, Historical Residential Records, and Other Household Database Listings

marriage, and fatherhood matured Momyer well before his peers. Across these early years of life, absolute focus and serious resolve were required for Momyer's success.

Following his junior and senior year at the University of Washington, Momyer prepared to leave college for the real world. It was a world without great promise. The Great Depression still gripped the nation, and the unemployment rate jumped back to nineteen percent as Momyer prepared for graduation.<sup>43</sup> At 2 o'clock in the afternoon on Monday, June 14th, 1937, Momyer's mother, brother, wife, and infant daughter watched with thousands of other relatives, families, and friends as William and 1,391 other college graduates walked across the stage and received their Bachelor degrees.<sup>44</sup> As he closed his eyes and listened to the Benediction delivered by the Reverend Alexander Winston, he reflected back on all he had lived to get to this point. Surely, he walked out of that building with satisfaction in his soul and determination on his face. His father would have been so proud.

<sup>&</sup>lt;sup>43</sup> Norman Frumkin, *Recession Prevention Handbook, Eleven Case Studies, 1948-2007*, (M.E. Sharpe, Inc., New York, 2010), 84.

<sup>&</sup>lt;sup>44</sup> "1,884 Students To Get Degrees at U. of W." Seattle Sunday Times, June 13, 1937.

## Chapter 2

### Pursuit Pilot

"Flying Cadets Needed" announced the newspaper. It was early 1938 and newspapers all over the land ran this short article. "More aviation cadets are urgently wanted by the War Department," it read. "232 unfilled vacancies exist for the March flying cadet class at the air corps training center, Randolph Field, Texas." In the state of Washington, an Air Corps recruiting board found a very willing volunteer - Mr. William Momyer. Momyer began his service at a time when airpower was still finding its place in national defense. Nearly thirteen years earlier, the airpower maverick, Billy Mitchell, faced court martial for his controversial statements about the Army and Navy's inattention to airpower's potential. Not much had changed since. During Momyer's first four years of service, he saw a force grow in size and capability before launching headlong into war against the Axis powers. Momyer's timing made him among the last to enter the 'small force,' placing him in the more experienced and senior minority when the force began to grow as the war loomed. Just as he had done in childhood, Momyer took on the responsibilities of officers normally more senior and more experienced. First, however, he had to pass the test of military pilot training.

Flying Cadet William W. Momyer began training at Randolph Field near San Antonio, Texas on March 1, 1938. He and 296 other Flying Cadets were beginning an incredible adventure.<sup>2</sup> Designated Class 39-A, signifying they were the first class scheduled to graduate in 1939, they were to that time the largest class of Flying Cadets in the history of the Air Corps Primary Flying School.<sup>3</sup> Randolph Field was an exciting place to be in 1938. Often called the West Point of the Air, "perhaps at no other place are there as many persons so vitally interested in all phases of flying."<sup>4</sup> The base itself was a sight to behold. Unlike many other hastily created fields of the time, the United States Army built Randolph with the idea of creating a permanent air station. The beautifully landscaped base was laid out in concentric circles with the officers'

<sup>&</sup>lt;sup>1</sup> "Flying Cadets Needed," *The Entiat Times*, February 3, 1938.

<sup>&</sup>lt;sup>2</sup> "Air Corps Newsletter," The Office of the Chief of the Air Corps, March 1, 1938. p. 8.
<sup>3</sup> "Air Corps Newsletter," The Office of the Chief of the Air Corps, March 16, 1938. p. 14.

<sup>&</sup>lt;sup>4</sup> "Air Corps Newsletter," The Office of the Chief of the Air Corps, June 1, 1938. p. 12.

club at the center. The 170-foot tower of the administration building was affectionately called 'The Taj Mahal' by the fliers because its strangely out of place appearance could be seen for miles and miles. Four large landing fields surrounded the central campus.<sup>5</sup>

The training was an intense one-year course of study. The Training Center, the organization responsible for oversight of the comprehensive program, controlled operations at both Randolph and nearby Kelly Field. The schooling was divided into three equal stages of four months. The first two, primary and basic, were conducted at the Primary Flying School at Randolph Field. For the final stage, the young aviators moved just a few miles away to the Advanced Flying School at Kelly Field, also in San Antonio.<sup>6</sup>

Although Momyer signed up for flying training, he was quickly reminded that he was also joining the military. For the first two weeks in March, Momyer felt the brunt of the watchful eye and criticizing manner of the upper class of flying cadets as they put his class through infantry, platoon, and company drills and taught them the customs of the new combat arm. After two weeks of intense training, the young aviators-to-be marched to the flight line to meet their instructors. From that moment forward, they were fully immersed in aviation. They took classes in aerodynamics, the theory of engines, mathematics, and radio. Each week they balanced the challenges of flying, ground school, calisthenics, and athletics. Saturdays brought the extra bonus of a parade and an inspection.<sup>7</sup>

The fear of not finishing the course weighed heavy on the mind of many of the students who arrived in San Antonio. Reportedly, instructors counseled students not to worry too much if they did get eliminated from training – "the standards were so high, only the most gifted could meet them." Much later in life, Momyer was asked if he was worried about getting eliminated from the program. "Yes," he replied, "I think you worried about doing something stupid." Momyer remembered the instructors used to watch the landings and bet beers

16

<sup>&</sup>lt;sup>5</sup> Rebecca Hancock Cameron, *Training to Fly: Military Flight Training 1907-1945* (Air Force History and Museums Program, 1999), p. 253.

<sup>&</sup>lt;sup>6</sup> "Air Corps Newsletter," The Office of the Chief of the Air Corps, September 15, 1937. p. 15.

<sup>&</sup>lt;sup>7</sup> "Air Corps Newsletter," The Office of the Chief of the Air Corps, March 16, 1938. p. 14.

<sup>&</sup>lt;sup>8</sup> Walter J. Boyne, "They Wanted Wings," Air Force Magazine, February 2009, p. 70.

on who would land properly. This got into the heads of the student fliers, often causing them to "level off a little high and stall it in." Just one "of those stupid mistakes and the next thing you know, you are riding the stage" out of town.<sup>9</sup>

But for many cadets it was more than the fear of 'washing out.' It was also the fear of what the future held if they succeeded. The words of a young officer aviator at the time captured the essence of the thoughts running through the mind of an aviation cadet. "If I remember rightly, the thought uppermost in a Flying Cadet's mind aside from 'can I get through the course?' is 'suppose I do get out of Kelly with embroidery over the left pocket [aviator wings]. What have I got?" Many doubted their future, "Have I made a ring-tailed monkey of myself by tossing away some of my best years learning to be a birdy and go by-by in the clouds when I might have spent the time moving in on the ground floor of the job at which I'll spend the rest of my life?" Although he could not answer these questions, this pilot believed, "anyone who goes down to Randolph and gets through Kelly is mildly insane. For that reason, if for no other, he will enjoy life more than the other fellow from there on out, come what will." 10

Momyer's training at Randolph took place in two-seat Consolidated PT-3s and North American BT-9s.<sup>11</sup> The first solo flight came shortly after the class began flying. One of Momyer's classmates, Charles Bond, later an ace with the Flying Tigers in China, remembered that for him the first solo followed just six hours of instruction when his instructor simply, "climbed down from the rear seat and said, 'Take it around the field, Bond, and land back here." <sup>12</sup> Momyer soloed even earlier. His primary instructor, S. D. 'Rosie' Grubbs, prided himself on the ability to solo his students before anyone else. He had a bet with the other instructors, and won time and time again. "He didn't care what happened to you," Momyer remembered, "he was going to win the bet." <sup>13</sup>

<sup>9</sup> General William W. Momyer Oral History, by Lt Col John N. Dick, 31 January 1977, p. 16, K239.0512-1068, IRIS No. 1029788, AFHRA.

 $<sup>^{\</sup>rm 10}$  "Air Corps Newsletter," The Office of the Chief of the Air Corps, September 15, 1937. p. 5.

<sup>&</sup>lt;sup>11</sup> "Air Corps Newsletter," The Office of the Chief of the Air Corps, October 1, 1938. p. 17.

<sup>&</sup>lt;sup>12</sup> Charles R. Bond and Terry H. Anderson, *A Flying Tiger's Diary* (Texas A&M University Press, College Station, 1988), p. 14.

General William W. Momyer Oral History, by Lt Col John N. Dick, 31 January 1977,
 p. 14, K239.0512-1068, IRIS No. 1029788, AFHRA.

Momyer also remembered 'Rosie' did a lot of yelling. In those days, the only way to communicate between the student and instructor was through a gosport-type helmet.<sup>14</sup> The instructor spoke into a tube connected to a line that ran to the ears of the student. Because the airplane was so loud, the instructor reduced the power of the engine to make it possible for instructor and student communication over the slightly reduced noise. Of course, that meant that the airplane would lose altitude, so verbal communication was kept at a minimum. The fliers compensated by using a variety of hand gestures and signals.<sup>15</sup> Still, Momyer remembered Rosie's yelling.

As they progressed through their training at Randolph, the student pilots got the opportunity to ballot for particular aviation specialties they would undertake in their Advanced Training at Kelly. At the time, the choices were observation, bombardment, attack, and pursuit. With Rosie's yelling reverberating in his ear, Momyer aimed for pursuit. "I didn't want another guy telling me how to fly," Momyer said later, "and I think that is characteristic of fighter pilots." Momyer also remembered there was an old adage for the selection process. "If you were a really smart guy but you could not fly, they would put you in bombardment. If you could fly but you did not have any brains, they would put you in pursuit; and if you did not have any brains and could not fly, they would put you in observation." A writer for a popular magazine of the day characterized the pursuit pilot in this way: "To be a pursuit pilot you've got to be a motor-cycle rider or an outboard motor-boat racer at heart. You've got to be scrappy, and you've got to be small." 18

A small and scrappy Momyer reported to Kelly Field for Advanced Flying School on October 8, 1938. On that day, 166 Flying Cadets remained out of the 296 who had begun the training at Randolph. In addition, there were four Regular Army officers and six National Guard officers making a total of 176

-

General William W. Momyer Oral History, by Lt Col John N. Dick, 31 January 1977,
 p. 14, K239.0512-1068, IRIS No. 1029788, AFHRA.

<sup>&</sup>lt;sup>15</sup> Rebecca Hancock Cameron, *Training to Fly: Military Flight Training 1907-1945* (Air Force History and Museums Program, 1999), p. 257.

General William W. Momyer Oral History, by Lt Col John N. Dick, 31 January 1977,
 p. 13, K239.0512-1068, IRIS No. 1029788, AFHRA.

General William W. Momyer Oral History, by Lt Col John N. Dick, 31 January 1977,
 p. 13, K239.0512-1068, IRIS No. 1029788, AFHRA.

<sup>&</sup>lt;sup>18</sup> Hickman Powell, "Pursuit Pilot," *Popular Science*, May 1941, p. 55.

students. These students separated into the four different specialized programs – 46 to Attack, 40 to Bombardment, 24 to Observation, and 66 to Pursuit.<sup>19</sup>

The region was going through a terrible dry spell at the time, and on their first flying day of advanced training, "Kelly Field was so hidden in the dust at times that it required extreme caution by the students and numerous approaches on some landings before the plane successfully reached the ground."<sup>20</sup> A great deal of the dust was due to the fact that Kelly, unlike Randolph, was a relatively austere field: the wooden hangars were World War I vintage; the landing strip covered in Bermuda grass and dirt.<sup>21</sup> The new location was not the only source of consternation. Momyer was also not fond of his assigned pursuit section instructor. "Unfortunately, the guy I had as a pursuit instructor was an old observation pilot," he remembered, "as a result, the students were much more aggressive than the instructor." Typically, each instructor took out five students at a time in two formations of three aircraft for training flights. Momyer and his fellow future pursuit pilots put their assigned instructor "on edge all the time because we flew too close on him."<sup>22</sup>

After months of hard work and dedication, Wednesday, February 1st dawned.<sup>23</sup> Momyer and 62 other new lieutenants officially became not only 'Airplane Pilot,' but also garnered the title of pursuit pilot. Colonel Clarence L. Tinker provided the graduation address for the new officers. A former Commandant of the Advanced Flying School, Tinker was the father of Second Lieutenant Clarence L. Tinker, Jr., also graduating with Momyer on that February Day. Although Tinker promised 'to be brief,' he regaled the crowd with his observations on flying and military life. He first challenged the men to continue a pursuit of excellence in flying. "There is no successful pilot," he said, "regardless of his age and the amount of his experience, that does not learn something from each new cross-country flight or each new tactical

<sup>&</sup>lt;sup>19</sup> "Air Corps Newsletter," The Office of the Chief of the Air Corps, October 15, 1938. p.

<sup>&</sup>lt;sup>20</sup> "Air Corps Newsletter," The Office of the Chief of the Air Corps, November 15, 1938. p. 1.

<sup>&</sup>lt;sup>21</sup> Rebecca Hancock Cameron, *Training to Fly: Military Flight Training 1907-1945* (Air Force History and Museums Program, 1999), p. 257.

<sup>&</sup>lt;sup>22</sup> General William W. Momyer Oral History, by Lt Col John N. Dick, 31 January 1977, p. 15, K239.0512-1068, IRIS No. 1029788, AFHRA.

<sup>&</sup>lt;sup>23</sup> "Air Corps Newsletter," The Office of the Chief of the Air Corps, February 15, 1939. p. 4.

mission." But being an officer was about more than being an excellent aviator; leadership and loyalty were essential ingredients as well. "Show me the unit whose commander is intensely loyal to his men, and I will accept their loyalty and discipline as unquestionable," for "loyalty downward automatically produces loyalty upward." He closed his formal remarks with a solemn reminder, "in exercising command over other men, we should ever be watchful that we act with understanding and justice and with a complete lack of bluster and pomp."<sup>24</sup> That night, the new graduates and their guests enjoyed a buffet supper at the Officers' Mess. A dance followed, lasting well into the night.<sup>25</sup>

A great number of new aviators marked graduation with another important event: marriage. On February 9th, Momyer served as an usher in the wedding of his classmate, Lieutenant John Evans. A week later, a San Antonio newspaper reported a marriage license had also been issued to another Kelly graduate and his sweetheart; William W. Momyer and Marguerite C. Wilson. Although the two were already husband and wife, they used that date the rest of their lives for their official marriage. The nearly four-year disparity had a simple explanation. At that time, married men were not allowed into flight training. Momyer had begun his military career with a lie, but it was one that established an essential truth: Pat sacrificed her time and even her status to provide William the opportunity to serve his country. It was a sacrifice that both she and the now three-year-old Jean made many times over the course of Momyer's long career. Pat and William kept their second wedding low key. Although the Air Corps Newsletter listed the "25 casualties amongst the ranks of the young bachelors in the graduating class," Momyer was not among them. And the course of the woung bachelors in the graduating class, Momyer was not among them.

All of the new lieutenants stayed on duty at Kelly Field until receiving news of their next assignments. At the time, there were 15 possible locations where a new aviator of any branch could be assigned. In mid-February 1939, Momyer and 33 others received orders to the 8th Pursuit Group at Langley

<sup>&</sup>lt;sup>24</sup> "Air Corps Newsletter," The Office of the Chief of the Air Corps, February 15, 1939. p.

 $<sup>^{25}</sup>$  "Air Corps Newsletter," The Office of the Chief of the Air Corps, February 15, 1939. p.  $^{5}$ 

<sup>&</sup>lt;sup>26</sup> "Evans-Weber Rites are Held," San Antonio Express, February 12, 1939.

<sup>&</sup>lt;sup>27</sup> "Marriage Licenses," San Antonio Light, February 16, 1939.

<sup>&</sup>lt;sup>28</sup> "Air Corps Newsletter," The Office of the Chief of the Air Corps, February 15, 1939. p. 7.

Field, Virginia.<sup>29</sup> The Momyer's arrived in the Tidewater and settled into a modest apartment in the Olde Wythe neighborhood of Hampton, Virginia. The process of moving into Apartment 11A of the Kecoughtan Court Apartments marked the first of many military moves for the young couple and their daughter. Located just blocks from the historic Hampton Roads and sharing a block with a brand new grocery store and movie theater, the apartments were the place to live for young couples.<sup>30</sup> Many Langley aviators resided in the same complex. Lieutenant Hubert Zemke lived in Apartment 63B. 'Hub,' as those who flew with him knew him, was Momyer's squadron mate and later become an ace and famous Group Commander in World War II.<sup>31</sup>

At the end of the 1930s, Langley Field was a beehive of activity, the home of one of the three active flying wings in the Air Corps. Langley's 2nd Wing controlled units at four disparate airfields, but the majority of the Wings' units were at Langley, including the 2d Bombardment Group, the 8th Pursuit Group, and the 41st Observation Squadron.<sup>32</sup> Among the offices stationed there when Momyer reported were Lieutenant Colonel Robert Olds and Lieutenant Curtis Lemay, both of the 2nd Bomb Group. The two were already icons at the field and in the service. Momyer soon knew them on sight. He could not then have known the impact those two names would have later in his career.

Momyer's own 8th Pursuit Group consisted of three Pursuit squadrons, the 33rd, 35th, and 36th. The squadrons were just beginning to take delivery of the new P-36 to replace the PB-2A.<sup>33</sup> Although Momyer wore wings, he now had to learn the trade of a combat pursuit pilot. During his first year at Langley, he mastered the P-36, which meant hours of training in acrobatics, air navigation, aerial gunnery, bombing, individual combat formation flying, instrument flying, night flying, and radio communication.<sup>34</sup> After a year of flying the P-36, aviators at Langley looked forward to the new and more capable

-

<sup>&</sup>lt;sup>29</sup> "Air Corps Newsletter," The Office of the Chief of the Air Corps, March 1, 1939. p. 8.

<sup>30</sup> http://www.oldewythehistory.com/photo\_gallery/businessandplaces.php

<sup>&</sup>lt;sup>31</sup> "Hill's Newport News City Directory," 1939, p. 620.

<sup>&</sup>lt;sup>32</sup> Maj Gen James F. McKinney, Adjutant General, USA, to all Corps Area Commanders, et al., "General Headquarters Air Force," 21 December 1936, Supporting Document 15 in "History of Langley Field, 1 March 1935 to 7 December 1941."

 $<sup>^{33}</sup>$  "Air Corps Newsletter," The Office of the Chief of the Air Corps, March 1, 1939, p. 17.

<sup>&</sup>lt;sup>34</sup> Rebecca Hancock Cameron, *Training to Fly: Military Flight Training 1907-1945* (Air Force History and Museums Program, 1999), p. 289.

P-40, a faster aircraft due to the sleeker surface area of the in-line versus the radial engine. The War Department had recently decided to purchase 524 P-40s at a cost of \$22,929 each, the largest single fighter order to that time. The first of these new P-40s was flown on April 4, 1940 and deliveries soon began to Langley Field.<sup>35</sup> On June 19, 1940, Second Lieutenant Momyer proceeded to Patterson Field, Ohio, where he and five other officers of the 35th Pursuit Squadron spent a number of weeks assisting in the accelerated service tests of the squadron's newest airplanes.<sup>36</sup>

In all, twenty-eight officers from Langley participated in these tests, which represented a new, expedient way of doing business in the rapidly growing Air Corps.<sup>37</sup> It was no accident that Lieutenant Momyer was one of those chosen. "The men were chosen carefully with a view to their fitness for the task, the idea being that the younger and less experienced officers, were considered personally suitable for the job, would obtain an accelerated flying experience for themselves as well as the airplane."<sup>38</sup> In addition to the great amount of time spent with the new aircraft, Momyer also had the added benefit of consulting with the aircraft-manufacturing representatives who could give him a better understanding of the systems of the P-40.<sup>39</sup>

Within a year Momyer was again on the move. In 1938, when General Henry 'Hap' Arnold became chief of the Air Corps, he decided to broaden the intelligence function of the Air Corps and gather data on Allied equipment and procedures. One of Arnold's young officers in the intelligence division in the Office of the Chief of Air Corps and a former advisor to the Argentine air force, Major Elwood Quesada, identified Lieutenant Momyer as a promising young officer for attaché duty. In a joint interview much later in life, the two recalled the circumstances of the assignment. "At the time I was in a fighter group, and I was sent, under the cover of being an air attaché, out to the Western Desert,"

<sup>&</sup>lt;sup>35</sup> Robert F. Dorr, Air Combat: An Oral History of Fighter Pilots (Penguin Group, New York, 2006), p. 15.

<sup>&</sup>lt;sup>36</sup> "Air Corps Newsletter," The Office of the Chief of the Air Corps, July 15, 1940, p. 2.

<sup>&</sup>lt;sup>37</sup> "Air Corps Newsletter," The Office of the Chief of the Air Corps, August 15, 1940. p. 4.

<sup>&</sup>lt;sup>38</sup> "Air Corps Newsletter," The Office of the Chief of the Air Corps, August 15, 1940. p. 4.

<sup>&</sup>lt;sup>39</sup> "Air Corps Newsletter," The Office of the Chief of the Air Corps, August 15, 1940. p. 4.

<sup>&</sup>lt;sup>40</sup> Craven and Cate, Army Air Forces in WWII, vol. 2, 3-4, 480.

Momyer remembered.<sup>41</sup> On March 23, 1941, Lieutenant Momyer departed the United States for Cairo, Egypt.<sup>42</sup> The trip took nearly a month. Officially, Momyer and other officers and enlisted men were responsible for outfitting, training, and equipping the British Air Force with the P-40; unofficially, they also reported to Washington on the progress of the war in the Western Desert. When he arrived in Egypt, Momyer remembered, "Greece had been evacuated, and Crete had fallen, and the British had practically no airplanes at all in the Western Desert."<sup>43</sup> Indeed, the situation in Egypt on Momyer's arrival in April 1941 was grim. Most of Western Europe belonged to the Axis powers, and in North Africa a weary British force was in the midst of a struggle with Germany's famed Africa Corps, soon to be led by Erwin Rommel.

In April of 1941, the P-40s from America began to reach the Middle East. These aircraft were brought by ship to Takoradi on the Gold Coast, reconstructed, and then flown along an old British air route across central Africa to Khartoum and then on to their bases.<sup>44</sup> The British obtained these aircraft for a counter-offensive and Momyer's services were in high demand, although the American Military Attaché in London believed Momyer too young to perform these important and sensitive duties.<sup>45</sup> Like any good military aviator, Momyer seized upon the opportunity and bargained his way into flying the P-40 in combat with the RAF. "I equipped the British squadrons with P-40s and took them up into combat," Momyer remembered, "then I would go back and outfit another squadron."<sup>46</sup>

While his combat hours with the British paled in comparison to Momyer's later experiences, he was in enough combat to see "what it was like to

<sup>41</sup> Richard H. Kohn and Joseph P. Harahan, editors, *Air Superiority in World War II and Korea* (Office of Air Force History, Washington, D.C., 1983), p. 29.

<sup>&</sup>lt;sup>42</sup> Frederick A. Johnsen, *P-40 Warhawk* (Osceola, Wisconsin: MBI Publishing Company, 1998), 74.

<sup>&</sup>lt;sup>43</sup> Richard H. Kohn and Joseph P. Harahan, editors, *Air Superiority in World War II and Korea* (Office of Air Force History, Washington, D.C., 1983), p. 27.

<sup>&</sup>lt;sup>44</sup> H. L. Thompson, *New Zealanders with the Royal Air Force*, vol. 3 (Wellington: Historical Publications Branch, 1959), 22.

<sup>&</sup>lt;sup>45</sup> United States Department of State / Foreign relations of the United States diplomatic papers, 1941. The British Commonwealth; the Near East and Africa (1941), p. 280-281.

General William W. Momyer Oral History, by Lt Col John N. Dick, 31 January 1977,
 p. 12, K239.0512-1068, IRIS No. 1029788, AFHRA.

be shot at and to shoot,"<sup>47</sup> making him one of America's few experienced pursuit pilots a short two years after first donning the uniform and months before the United States entered the war. During this time, Momyer gained exposure to the evolving British arguments over the control of airpower. Early on in British war efforts, Prime Minister Winston Churchill had ruled against the practice of parceling airpower out to ground armies. He wanted British airmen to command the airpower that supported the British Army, which in North Africa meant two men: Arthur Tedder and Maori Coningham. Tedder commanded all British Air Forces in the region as the air officer commanding for RAF Middle East, and Coningham had operational control over the Western Desert Air Force aircraft that provided support for the British Eighth Army. As preparation for a counter-offensive continued in 1941, the two officers developed a system of centralized command and control of airpower for the RAF forces in the Western Desert.<sup>48</sup>

Although Momyer's background had prepared him for helping out with the British P-40s in a technical and tactical sense, he quickly discovered that he had a lot to learn about the employment of airpower. The Western Desert was his classroom. The centralized control of airpower, Momyer found, allowed Tedder and Coningham to move the weight of air effort wherever the situation dictated. This provided the British the capability to wage a deliberate air campaign that prioritized air superiority and categorized other important air missions into interdiction, close air support, and reconnaissance. Coningham believed air superiority provided freedom for both air forces and ground forces to pursue their objectives in their respective domains free from significant interference from enemy air forces, and he was convinced air superiority required attacks on enemy airfields, the enemy aircraft on those fields, and, of course, enemy aircraft in the air. Aerial interdiction, often called interdiction or battlefield isolation, aimed to interrupt the supply lines providing fuel for the enemy's ground efforts. In this mission, the British attacked ships, ports, railroad lines, rail cars, and vehicle convoys to slow the flow of supplies to the

 <sup>&</sup>lt;sup>47</sup> General William W. Momyer Oral History, by Lt Col John N. Dick, 31 January 1977,
 p. 30, K239.0512-1068, IRIS No. 1029788, AFHRA.

<sup>&</sup>lt;sup>48</sup> Vincent Orange, Coningham: A Biography of Air Marshal Sir Arthur Coningham, KCB, KBE, DSO, MC, DFC, AFC (London: Methuen London, 1990), 79-82.

enemy front line. Close air support battled the enemy's ground force from the air, but in a more direct way than the interdiction mission. In this role, airpower provided airborne firepower for the ground forces against enemy force concentrations, and was naturally the ground force's favorite mission because the effects were immediate, visible, and assessable. Supporting all of these tactical missions in some way was reconnaissance. This mission provided the commander the ability to plan for operations before the battle and assess the effect of the air campaign during and after the battle. In the years to come, the British ideation of air power would become a central guiding light for Momyer and the American air arm.

December 7, 1941 found Momyer in Egypt. The news of the Japanese attack on Pearl Harbor affected Momyer a bit differently than those at home. He was already in combat and half a world away, though he now knew the next time he took to the skies to wage combat in the air, it would be for America. War had arrived and Momyer was anxious to get back home to rejoin an American pursuit squadron, a process that took nearly three months.

While he had been away, much had changed: he was no longer a part of the Air Corps, but was now an officer in the U.S. Army Air Forces, which was in the midst of expanding 12-fold in material terms and 25-fold in manpower levels. Though Momyer had barely three years in service, he was one of the service's more experienced aviators relative to the influx of new trainees, making him a logical choice for leadership positions. As a result, he quickly became the Operations Officer, the second in command, of the 60th Pursuit Squadron of the 33rd Pursuit Group at Bolling Field, Washington, D.C. Upon assuming these duties, remembered one pilot, Momyer allowed but two activities in the operations room: reading technical orders or playing checkers.<sup>49</sup>

The 33rd Pursuit Group consisted of the 58th, 59th, and 60th Pursuit Squadrons, and was commanded by Lieutenant Colonel Elwood Quesada, the same officer who selected Momyer for attaché duty in the Western Desert. Quesada was a dynamic and forceful leader who, within weeks, took a shine once again to Momyer and placed him in command of the 58th Pursuit

<sup>&</sup>lt;sup>49</sup> James E. Reed, *The Fighting 33rd Nomads in World War II*, vol. 1 (Memphis, Tennessee: Reed Publishers, 1987), p. 86.

Squadron.<sup>50</sup> Momyer was 26 years old, had been in the service for four years, and was now in command of over 200 personnel defending America and training for the possibility of war. He assumed responsibility for a P-40 fleet of 24 airplanes. In May of 1942, now-Captain Momyer led his squadron to Mills Field in San Francisco for temporary duty in connection with West Coast Defense. By the summer, he returned to Norfolk to assume command of the 33rd Pursuit Group, now as a Major still working for Quesada, who had himself moved up to assume command of the Philadelphia Air Defense Wing.<sup>51</sup> If command of a squadron was a lot of responsibility, command of a group was a staggering amount for the young Momyer. There were other group commanders near Momyer's age, but Quesada, his predecessor, was ten years his senior. Once again, Momyer's assumption of more responsibility brought yet another level of wisdom and experience. Quesada handpicked Momyer as his successor. "Momyer to me represents all that American youth should be," Quesada wrote to a colleague. "He is energetic, enthusiastic, courageous, and super-conscientious," adding, "I cannot recommend Momyer to you too highly . . . he is by far the best I've had."52

As Momyer took command of the 33rd, American and British leaders agreed on a plan to land in Morocco and Algeria and then press the German Army in Tunisia. That plan soon became Operation TORCH, the allied invasion of North Africa. Lieutenant General Dwight D. Eisenhower was tapped to serve as the Allied Expeditionary Force Commander. Eisenhower's force consisted of three separate task groups. Both the Eastern and Central Task Force consisted of British and American troops and planned to depart from England. The Eastern Task Force was to land at Algiers; the Central Task Force was to attack the Algerian port city of Oran; and the Western Task Force, which was

<sup>&</sup>lt;sup>50</sup> Air Force Historical Research Agency, "Organizational History Branch, Squadrons and Flights," http://www.au.af.mil/au/afhra/rso/squadrons\_flights\_index.html, 58th, 59th, and 60th Fighter Squadrons; *History of the 58th Fighter Squadron, 10/42 - 6/44*, p. 19, SQ-FI-58-HI 15 Jan 1941 – Dec 1943, IRIS No. 00056741, AFHRA.

<sup>&</sup>lt;sup>51</sup> HQ I Fighter Command, Special Order Number 145, IRIS No. 00056767, in the USAF Collection, AFHRA; Air Force Historical Research Agency, "Organizational History Branch, Wings and Groups,"

http://afhra.maxwell.af.mil/rso/wings\_groups\_pages/0033og.asp.

<sup>&</sup>lt;sup>52</sup> Philadelphia Air Defense Wing History, Call # WG-PHILA-HI, 8 Dec 1941, IRIS #0010383, in the USAF Collection, AFHRA, Maxwell AFB AL.

exclusively American, planned to assault the shores of French Morocco after a long journey from the east coast of the United States.<sup>53</sup>

The airpower resources for Operation TORCH were supplied mainly by Major General Carl Spaatz's Eighth Air Force, then preparing to start highaltitude, precision daylight bombing of Germany from the United Kingdom. Spaatz chose Brigadier General Jimmy Doolittle, who was just back from leading the bombing raid on Tokyo, to head the air contingent for the invasion. Code-named JUNIOR, the organization responsible for the training and planning of the air effort was soon designated as the Twelfth Air Force. Under the Twelfth, Doolittle created a sub-organization to cooperate directly with the landings of the Western Task Force in French Morocco: XII Air Support Command (known as XII ASC), commanded by Brigadier General John Cannon. On a trip back to the United States in September, Doolittle worked to build the strength of the air contingent for TORCH, and particularly the XII ASC. Momyer's 33rd, now called a Fighter Group, was one of his first targets. With that, Momyer garnered the opportunity to lead his men into combat.

Momyer's exposure to early British discussions of the use of tactical airpower in the Western Desert set a foundation not shared by other American pilots, who has a general rule had been steeped in the promise and theory of strategic bombardment at the Air Corps Tactical School. Instead, his experience provided a lens with which he would observe the soon to come discussions over the efficient and effective use of American tactical airpower in the early days of the second World War. With this experience and his selection to group command, Momyer had accomplished much across a few years in uniform. Seen in the bigger context of the war, Momyer would be one of the first commanders of an American fighter organization to take the fight to the enemy. Many lessons lie ahead.

\_

<sup>&</sup>lt;sup>53</sup> John Gordon, IV, "Joint Power Projection: OPERATION TORCH," *Joint Forces Quarterly*, Spring 1994, 61-62; U.S. Air Force Historical Study No. 105 (AAFRH-5), *Air Phase of the North African Invasion*, Assistant Chief of Air Staff, Intelligence, Historical Division, November 1944, 8.

<sup>&</sup>lt;sup>54</sup> Craven and Cate, Army Air Forces in WWII, vol 2, 51.

<sup>55</sup> Craven and Cate, Army Air Forces in WWII, vol. 2, 53.

<sup>&</sup>lt;sup>56</sup> AAFRH-5, Air Phase of the North African Invasion, 46-47.

## Chapter 3

# Formative Campaign

Momyer and his group were destined for North Africa. Although the initial arrival was less than smooth, Momyer and his men learned the first lesson of combat – no plan survives contact with the enemy. It was a lesson best learned early and it had great impact on Momyer throughout the rest of his career. Through these early months in combat, Momyer led a fighter group through the uncertainty of unclear doctrine and questionable command and control and into the days of Allied air superiority and an enemy on the run. North Africa was the shaping drama of Momyer's early professional career. Momyer, a key mid-level commander in the Allied tactical air efforts in Tunisia, would see the evolution of the application of American tactical airpower from a front row seat.

Although Momyer and the men of the 33rd knew they were destined for combat, they did not know where. As the fall of 1942 approached, experiment and practice with catapult operations suggested maritime operations of some sort, as the memory of one pilot confirmed: "we then knew that we would be launched from a carrier, but we didn't know our destination." In early October, Momyer directed his men to transport eight P-40s to the docks at Naval Station Norfolk for a rehearsal aboard the *Chenango*, a fleet oiler recently converted into an escort carrier. Less than a week after that, on October 21, Momyer ordered his men to fly all seventy-nine of the 33rd Fighter Group's aircraft from their dispersed locations to the pier at Naval Station Norfolk, where for two days the men watched as P-40 after P-40 slowly rose from the pier, hovered over the *Chenango*'s deck, and then descended gently to rest in its proper place. It was surreal to watch Army Air Force aircraft being loaded onto a Navy ship. Once all the aircraft were loaded, the fliers spent the night in their tight quarters on the *Chenango*.4

<sup>&</sup>lt;sup>1</sup> Reed, The Fighting 33rd Nomads, Volume I, 52.

<sup>&</sup>lt;sup>2</sup> William T. Y'Blood. *Hunter-Killer: U.S. Escort Carriers in the Battle of the Atlantic* (Naval Institute Press, Annapolis, Maryland, 1983), p. 14.

<sup>&</sup>lt;sup>3</sup> *History of the 58th Fighter Squadron*, p. 32, SQ-FI-60-HI, 15 Jan 1941 – Dec 1943, IRIS No. 00056741, AFHRA.

<sup>&</sup>lt;sup>4</sup> William T. Y'Blood. *Hunter-Killer: U.S. Escort Carriers in the Battle of the Atlantic* (Naval Institute Press, Annapolis, Maryland, 1983), p. 14.

Although he was very proud of the men of the 33rd, Momyer wondered if they were ready for what lie ahead. The experience level of the group's pilots was very low. Most of the pilots had only recently graduated from flight school and one had crashed and died merely flying to Norfolk.<sup>5</sup> Since the attack on Pearl Harbor, the men of the 33rd Fighter Group had spent the majority of their time sitting alert for coastal defense, and only the 58th Fighter Squadron had participated in the large-scale air and ground exercises held in Louisiana and the Carolinas in 1941.6 None of this was, however, atypical. The 1941-42 Army Air Force training directive stated, "Emphasis will be placed on training and operations at altitudes above 20,000 feet, including combat maneuvers, visual and photographic reconnaissance, aerial gunnery and bombing at or near the service ceiling of the aircraft." Beyond that, no organization or individual in the Army Air Forces had established a formal strategy for waging an air campaign. The most recent Army Field Manual, FM 31-35, Aviation in Support of Ground Forces, focused more on the organization of airpower than its employment, and called for the air commander to come under the immediate control of the ground force commander. This lack of combat readiness was not unique to Airmen. Lieutenant General Leslie J. McNair, commander of the Army Ground Forces, said in December of 1942, "So far as I know, there is no U.S. ground unit overseas which had air-ground training before leaving the U.S., other than the superficial occasions incident to large maneuvers."8

On October 24, 1942, the *Chenango* left Norfolk with well over one hundred ships of the Western Naval Task Force, operating under the name Task Force 34 and under command of Rear Admiral H.K. Hewitt.<sup>9</sup> The fliers of

<sup>&</sup>lt;sup>5</sup> Momyer Answers to Questionnaire, Attachment to Letter, Captain Richard L. Dunn to General William W. Momyer, Commander, TAC, 18 October 1972, 168.7041-58, IRIS No. 1001170.

<sup>&</sup>lt;sup>6</sup> History of the 58th Fighter Squadron, p. 9, SQ-FI-60-HI, 15 Jan 1941 – Dec 1943, IRIS No. 00056741, AFHRA.

<sup>&</sup>lt;sup>7</sup> GHQ AF Training Directive, 1941-42, 1 Jun 41, as quoted in Christopher R. Gabel, The U.S. Army GHQ Maneuvers of 1941 (Center of Military History, United States Army, Washington, D.C., 1992), p. 41.

<sup>&</sup>lt;sup>8</sup> Benjamin Franklin Cooling, ed., *Case Studies in the Achievement of Air Superiority* (Washington, D.C.: Center for Air Force History, 1994), 225-226; *History of the 58th Fighter Squadron*, 7-13; McNair as quoted in Richard G. Davis, *Carl A. Spaatz and the Air War in Europe* (Center for Air Force History: Washington, D.C., 1993), 135.

<sup>9</sup> *History of the 60th Fighter Squadron*, p. 19, SQ-FI-60-HI Oct 1942 – Dec 1943, IRIS No. 00056791, AFHRA.

the 33rd made the best of ship life aboard the *Chenango*, enjoying the hospitality of the naval personnel. Just a few days after departing Norfolk, the *Chenango* skipper announced the convoy was part of Operation TORCH, the Allied invasion of North Africa. Decifically, Momyer's group was part of the Western Task Force, commanded by Major General George S. Patton, Jr. This task force planned to split into three separate sub-task forces off the coast of French Morocco. The southern sub-task force was to attack Safi, a small port southwest of Casablanca in Operation BLACKSTONE. The central sub-task force was to come ashore at Fedala, a town northeast of Casablanca in Operation BRUSHWOOD. Lastly, the northern sub-task force, under the command of General Lucian Truscott, was to land on the beaches of Port Lyautey, 60 miles to the northwest of Casablanca in Operation GOALPOST. The men of the 33rd Fighter Group were to enter the conflict at Port Lyautey.

Operation GOALPOST had one of the most important and toughest missions of the invasion. The main objectives of GOALPOST were two airfields: Port Lyautey and Sale. The airfield at Port Lyautey was the only "all-weather concrete landing strip in northwestern Africa," making it a perfect first home in Africa for the 33rd Fighter Group. 12 In an earlier memorandum to General Patton, General Canon's adjutant outlined the plan for XII Air Support Command's support of GOALPOST into four phases. In the first phase, those members of the 33rd Fighter Group who were not flying airplanes from the carriers were to assist the assault operations of the rest of the sub-task force, before transporting aviation supplies to the airfield at Port Lyautey. In the second phase, the headquarters elements of XII ASC aimed to establish a command post ashore while combat engineers were to "repair, maintain, and enlarge" the airfield. In the third phase, ambitiously planned for nightfall of the first day, the 33rd pilots were to launch from the carrier and help the Navy with the "destruction of any enemy aircraft and in its close support missions." After

-

<sup>&</sup>lt;sup>10</sup> Reed, *The Fighting 33rd Nomads*, vol. 1, 52-74.

<sup>&</sup>lt;sup>11</sup> William B. Breuer, *Operation Torch: The Allied Gamble to Invade North Africa* (New York: St. Martin's Press, 1985), 175.

<sup>&</sup>lt;sup>12</sup> Jack Coggins, *The Campaign for North Africa* (New York: Doubleday and Company, Inc, 1980), 74.

completing these missions, the 33rd planned to make Port Lyautey home and be available for air support of the American attack at Casablanca.<sup>13</sup>

On November 7, 1942, the task force arrived off the coast of French Morocco, approximately 30 miles due west of Casablanca. The invasion plan called for the pilots of the 33rd to fly directly east to Casablanca and then drop down to low altitude and fly about 90 miles north to the airfield. However, they were to stay on the deck of the Chenango until the field at Port Lyautey was secure. Momyer expected the 'all secure' call by the close of the first day, but securing Port Lyautey turned out to be one of the most difficult tasks of the entire invasion.<sup>14</sup> There were 3,000 French defenders in the area surrounding Mehdia and Port Lyautey, and capturing Port Lyautey took three days and the lives of 79 Americans. 15 As these battles raged, Momyer and the other 33rd pilots waited on the Chenango, ready to take off at a moment's notice. After November 8th passed without the word to launch, one of the pilots wrote in his diary, "Things must not be going so good." Finally, on November 10, Momyer received the authority to launch his aircraft. He ordered two lieutenants to launch and check out the field before the main body of aircraft left the ship, indicating some doubt in Momyer's mind about the conditions at the field.<sup>17</sup> When these pilots reached Port Lyautey, they found the runway full of craters from the Allied attacks. Since they could not go back to the carrier, they had no choice but to land. On landing, one of the aviators sheared the gear from his airplane and the other nosed over in the mud on the side of the runway. 18

\_

<sup>&</sup>lt;sup>13</sup> "XII Air Support Command: Air Plan," by Major Samuel J. Blocher, 4 October 1942, 651.322-1 Sep - Oct 1942, IRIS No. 00246, in the USAF collection, AFHRA; George F. Howe, *Northwest Africa: Seizing the Initiative in the West* (Washington, D.C.: Office of the Chief of Military History, Department of the Army, 1957), 147.

<sup>&</sup>lt;sup>14</sup> Reed, *The Fighting 33rd Nomads*, vol. 1 (Reed Publishers, Memphis, Tennessee, 1987), 54.

<sup>&</sup>lt;sup>15</sup> Rick Atkinson, *An Army at Dawn: The War in North Africa, 1942-43* (New York: Henry Holt and Company, 2002), 141-147.

<sup>&</sup>lt;sup>16</sup> Reed, *The Fighting 33rd Nomads*, vol. 1 (Reed Publishers, Memphis, Tennessee, 1987), 86-87.

<sup>&</sup>lt;sup>17</sup> Craven and Cate, Army Air Forces in WWII, vol. 2, 77.

<sup>&</sup>lt;sup>18</sup> Jay A. Stout, *The Men Who Killed the Luftwaffe: The U.S. Army Air Forces against Germany* (Stackpole Books, Mechanicsburg, Pennsylvania, 2010), p.64.

Later, the first wave of 33rd planes had a challenging time landing there as well, including Momyer, whose own landing gear was damaged.<sup>19</sup>

This was the not the way for a fighter group commander to arrive in war. After his own eventful landing, Momyer climbed out of his damaged P-40 to survey the field. French gunfire still rained down from the surrounding hills. Realizing the entire landing operation and the fate of his group were in jeopardy, Momyer assessed the situation on foot and under the heat of enemy sniper and artillery fire. As he ordered the second wave of P-40s to delay their arrival, another pilot crashed, his aircraft flipping upside down. Momyer ran toward the wreckage. Realizing the aircraft could explode into flame at any moment, he removed the pilot from the tangled metal and moved him to safety. Momyer's heroism later earned him the Silver Star, the third-highest combat military decoration for valor in the face of the enemy.<sup>20</sup>

Continuous rainfall through the day of the tenth matched the mood of the men. Although they were glad to be alive, things had not gone well. Smashed French aircraft and ditched P-40s littered the field, either lying in bomb craters with broken landing gear or buried deep in the mud. Sniper bullets whizzed by the ears of the men as they carefully made their way around the field. A Navy destroyer just off-shore poured shells at the ridge nearby. Recently arrived support personnel, still weary from their beach assaults, guarded over 500 French prisoners within the walls of the pink, shelled-out, and charred hangar on the field. At midnight, the shrill blast of a bugle sounded across the airfield. The 33rd personnel jumped to action in fear of a French attack. The words of the 58th Fighter Squadron historian captured the suspense: "Circling the front of the hangar in horse-shoe formation, the Squadron sinks on the ground with rifles ready, as a blurring light moves up the road toward the field. As fingers are tense upon triggers the password is given . . . and answered. It's a French general come to sign the treaty of peace. The 58th's relieved sigh shatters the silence."21 The Frenchman's entreaty

\_

<sup>&</sup>lt;sup>19</sup> Jay A. Stout, *The Men Who Killed the Luftwaffe: The U.S. Army Air Forces against Germany* (Stackpole Books, Mechanicsburg, Pennsylvania, 2010), p.65.

<sup>&</sup>lt;sup>20</sup> Headquarters, 47th Wing, General Orders No. 3 (March 11, 1943), Silver Star Citation for Colonel (Air Corps) William Wallace Momyer, for actions November 1942.

<sup>&</sup>lt;sup>21</sup> *History of the 58th Fighter Squadron*, p. 50, SQ-FI-60-HI, 15 Jan 1941 – Dec 1943, IRIS No. 00056741, AFHRA.

passed from Momyer to a naval officer aboard the Dallas and on to General Truscott's headquarters. By 8:00 AM, the battle for Port Lyautey was officially over.<sup>22</sup>

Following the treaty, Momyer gave the order to bring the remainder of the group's P-40s to the field.<sup>23</sup> Of the seventy-seven P-40s launched from the Chenango, one flew into the sea moments after catapulting, one disappeared in the fog, one was never heard from again, and seventeen received damage landing at Port Lyautey.<sup>24</sup> For the next few days, the men of the 33rd spent their days repairing airplanes and getting the field at Lyautey up to speed to sustain operations. After days of hard work, only five of the airplanes damaged on landing could be fully repaired.<sup>25</sup> On November 14th, thirty-five more pilots with P-40s arrived at the field. These men were the 'advance attrition' forces, and included among them Major Philip Cochran, who was well known as the real-life model for the character Flip Corkin in cartoonist Milton Caniff's popular comic strip "Terry and the Pirates."<sup>26</sup> On November 17th, Momyer left Port Lyautey with the aircraft of the 59th and 60th Fighter Squadrons for a new home at Cazes Airfield in Casablanca, where Momyer and the other officers found rooms in the Suisse and Reserve Hotels in the city while the enlisted ranks lodged in a large, open hangar.<sup>27</sup>

As the 33rd got settled in French Morocco, the Germans began a North African invasion of their own through Sicily into Tunisia. The airdromes at Tunis and Bizerte quickly filled with over 150 German and Italian fighters and dive-bombers. Allied forces, the majority of which had been in the Eastern Task Force of Operation TORCH, charged eastward in an attempt to forestall the Axis

-

<sup>&</sup>lt;sup>22</sup> Samuel Eliot Morison, *History of United States Naval Operations in World War II: Operations in North African Waters* (Little and Brown, Boston, 1947), 133.

 $<sup>^{23}</sup>$  History of the 58th Fighter Squadron, p. 50, SQ-FI-60-HI, 15 Jan 1941 – Dec 1943, IRIS No. 00056741, AFHRA.

<sup>&</sup>lt;sup>24</sup> U.S. Air Force Historical Study No. 114 (AAFRH-14), *The Twelfth Air Force in the North African Winter Campaign: 11 November 1942 to the Reorganization of 18 February 1943*, Army Air Forces Historical Office, January 1946, 8; Craven and Cate, *Army Air Forces in WWII*, vol. 2, 77.

<sup>&</sup>lt;sup>25</sup> Carl Molesworth, *P-40 Warhawk Aces of the MTO* (Osprey Publishing, Minneapolis, 2002), 26.

<sup>&</sup>lt;sup>26</sup> U.S. Air Force Historical Study No. 105 (AAFRH-5), *Air Phase of the North African Invasion*, Assistant Chief of Air Staff, Intelligence, November 1944, 75.

<sup>&</sup>lt;sup>27</sup> *History of the 60th Fighter Squadron*, p. 13, SQ-FI-60-HI Oct 1942 – Dec 1943, IRIS No. 00056791, AFHRA.

occupation of Tunisia. The 33rd missed most of this action, and instead spent their time training a group of Free French aviators. But they did not wait long to enter the active fray.<sup>28</sup>

As the Allies attempted their initial push through Tunisia, they learned distance severely hampered air support for Allied ground troops. The nearness of the German airfields permitted Axis ground troops to maintain Ju-87 'Stuka' dive-bombers on call within five to ten minutes flying time of the front lines. In contrast, the nearest Allied bases at Youks-les-Bains, Algeria and Souk-el-Arba, Tunisia were 150 and 70 miles away from the front lines in the north. At typical cruise speeds, respective flight times to the front lines were approximately forty and twenty minutes. This not only resulted in longer response times, but also very little loiter time over the battlefield before running low on fuel. The Germans understood this dynamic well. Whenever Allied aircraft departed, the Stukas reappeared.

As a result, Doolittle pressed to bring more of the Twelfth forward to support operations in Tunisia. Air Marshal Welsh of the RAF's Eastern Command approved Doolittle's request to begin moving aircraft forward to the Tebessa region of Eastern Algeria. As a part of this deployment, Momyer's men moved forward in shifts. In late November the 60th began moving east from Casablanca, followed on December 6 by those 58th Squadron pilots who had to cross over 800 miles to reach their new bases closer to Tunisia. The next day, the 58th and 60th flew combat missions over Gabes in Tunisia, a key Axis seaport for the buildup of forces in Tunisia and the site of one of their major airfields, Cikhira. On that day, the first anniversary of the Japanese attack on Pearl Harbor, Momyer lost his first aviator to hostile fire. Lieutenant Perry Bowser was shot down by heavy enemy anti-aircraft fire as he strafed

-

homepage.mac.com/techase/LRC/

<sup>&</sup>lt;sup>28</sup> AAFRH-14, *The Twelfth Air Force in North Africa*, 15-21; Craven and Cate, *Army Air Forces in WWII*, vol. 2, 84-88; David R. Mets, *Master of Airpower: General Carl A. Spaatz* (Presidio Press: Novato, California, 1988), 147. The Craven and Cate volume states that both Doolittle and Vandenberg also felt that the B-17's should be attacking ports rather than airfields.

 <sup>&</sup>lt;sup>29</sup> Craven and Cate, *Army Air Forces in WWII*, vol. 2, 88-89; Mortensen, *A Pattern for Joint Operations: World War II Close Air Support in North Africa*, (Washington, D.C.: Office of Air Force History and US Army Center of Military History, 1987), 60-61.
 <sup>30</sup> History of the 60th Fighter Squadron, p. 15, SQ-FI-60-HI Oct 1942 – Dec 1943, IRIS No. 00056791, AFHRA; Capt Levi Chase Flight Log, December 1942, available from

German transport aircraft on the runway at Gabes. The sacrifice of the men of the 33rd had only just begun.<sup>31</sup>

As the 33rd moved in, just over one hundred miles to the north, the Allied ground push into Tunisia met with difficulty. In a December 3rd report to the Combined Chiefs of Staff, Eisenhower stated, "We have gone beyond the sustainable limit of air capabilities in supporting ground forces in a pell-mell race for Tunisia."32 Eisenhower ordered all Allied air attacks in the near future to focus on ports, enemy roads, and "occasional fighter attacks against existing airfields."33 Recognizing his air effort was floundering, Eisenhower searched for a new command arrangement to create the conditions for success. General Henry Hap Arnold, the Army Air Forces Chief, encouraged Eisenhower to construct a theater air force headquarters, with Spaatz at the helm. About the same time, Air Marshal Sir Arthur William Tedder, then serving as the air officer commanding-in-chief for the Middle East, visited Eisenhower and verified the disarray of his air situation. Tedder volunteered to take over as the air theater commander while still maintaining responsibility for British forces in the Middle East and air operations over the rest of the Mediterranean. Eisenhower did not initially agree to either arrangement and continued to search for his preferred solution.<sup>34</sup>

After a short stay at Youks, the men of the 58th moved forward to Thelepte, Tunisia under the command of Major Philip Cochran. Only fifty miles to the east of Youks, Thelepte was the most forward Allied air base in the region. The field occupied high flatlands in the western portion of Tunisia between two north-south mountain ranges known as the Western and Eastern Dorsal. The terrain at Thelepte was less susceptible to damage from the rains, and the Germans were, "rather amazed at the rapidity with which the Allies had

\_

<sup>&</sup>lt;sup>31</sup> *History of the 60th Fighter Squadron*, p. 15, SQ-FI-60-HI Oct 1942 – Dec 1943, IRIS No. 00056791, AFHRA.

<sup>&</sup>lt;sup>32</sup> George F. Howe, *Northwest Africa: Seizing the Initiative in the West* (U.S. Army Center of Military History, Washington, D.C., 1991), 320.

<sup>&</sup>lt;sup>33</sup> George F. Howe, *Northwest Africa: Seizing the Initiative in the West* (U.S. Army Center of Military History, Washington, D.C., 1991), 320.

<sup>&</sup>lt;sup>34</sup> David Jablonsky, *War by Land, Sea, and Air: Dwight Eisenhower and the Concept of Unified Command* (Yale Library of Military History, 2010), 80.

set up adequate airfields in the highly unsuitable terrain."<sup>35</sup> Thelepte's proximity to the front lines made it one of the most valuable bases of the Tunisian campaign.

In late December, Momyer moved his headquarters east to join his men at Thelepte.<sup>36</sup> This move coincided with the forward deployment of the XII Air Support Command (XII ASC) as well as a general reorganization of Eisenhower's air forces.<sup>37</sup> On January 5th, Eisenhower changed General Spaatz's title to Commander, Allied Air Force. The reorganization directed unified Allied air operations and placed Spaatz in charge of both the American Twelfth Air Force and the British Eastern Air Command. These two commands now split air operations along functional lines, with the Eastern Air Command responsible for tactical operations and the Twelfth Air Force responsible for the bombing of airfields and ports. Although this reorganization moved the Allied air forces closer to centralized control, poor communications and great distances continued to hinder the coordination of operations.<sup>38</sup>

While at Thelepte, the XII ASC set objectives for Momyer's group in preparation for a renewed Allied push into Tunisia. The 33rd was to gain air superiority in the II Corps area of operations, support the ground forces with both reconnaissance and attacks on enemy troops, and to provide maximum protection for Allied ground units against enemy air attack. In accordance with prevailing American air support doctrine, Brigadier General Howard Craig, now Momyer's superior as commander of the XII ASC, located his headquarters adjacent to the II Corps command post on a wooded hillside near Tebessa. Command arrangements gave II Corps operational control of XII ASC aircraft. This control determined and often limited the freedom of movement for XII ASC. On more than one occasion, for instance, Major General Lloyd Freedendall, the II Corps commander, denied air support to French units under attack less than

-

<sup>&</sup>lt;sup>35</sup> Lieutenant General Hellmuth Felny, "The German Air Force in the Mediterranean Theater of War," 1955, AFHRA KH3.107-161, p. 582.

 $<sup>^{36}</sup>$  History of the 60th Fighter Squadron, p. 15, SQ-FI-60-HI Oct 1942 – Dec 1943, IRIS No. 00056791, AFHRA.

<sup>&</sup>lt;sup>37</sup> Craven and Cate, *Army Air Forces in WWII*, vol. 2, 127-128; Headquarters XII ASC, Report on Operations, Tunisia, 13 January 1943 – 9 April 1943, p. 2, 651.3069-1, IRIS No. 00246452, AFHRA; Mets, *Master of Airpower*, 149.

<sup>&</sup>lt;sup>38</sup> David N. Spires, *Airpower for Patton's Army: The 19th Tactical Air Command in the Second World War* (U.S. Government Printing Office: Washington, D.C., 2002), 9-10.

a hundred miles from the field at Thelepte, well within range of Momyer's aircraft, in deference to potential air needs for American troops elsewhere.<sup>39</sup>

The forward position of Thelepte made it not only valuable to the Allies, but also highly vulnerable to attacks from German aircraft. The men of the 33rd lived either in a ravine approximately a half-hour walk from the open field where the aircraft were parked, or in the ridges and scrub brush surrounding the field. Groups of men constructed shelters by digging holes in the ground and covering them with gasoline drum skeletons. The contingent received almost daily airfield attacks from both German fighter and bomber aircraft. Initially, there was no early warning radar and the 33rd depended on warning calls from French observers in the hills surrounding the airfield. As an added measure, the 33rd kept two aircraft flying combat air patrol (CAP) at all times during the daylight hours, and P-40s often fought German aircraft directly over the field.40

One of Momyer's first flights in January fit this pattern. On January 4th, six German Ju-88 bombers attacked the field with Me-109s as escort. When the attack commenced, Momyer ran to his P-40 and scrambled to meet the marauders. Moments after the wheels of Momyer's P-40 left the ground, a German Ju-88 plummeted to the earth. Momyer's six .50 caliber machine guns found their mark.<sup>41</sup> Just over 34 years later, Momyer recalled, "I suppose it's the same with any other pilot who shoots down his first airplane, the excitement of it - - your adrenaline runs so high." After first battling his increased heart rate, Momyer then took advantage of the quicker response time brought on by the adrenaline rush, "Finally, I just took both feet off the rudder and put them back in and started to shoot . . . I think that most guys that have been in combat probably hold true to that, after the initial exposures, you begin to take things a little bit more in stride."42 Despite Momyer's victory, the day's

<sup>&</sup>lt;sup>39</sup> HQ XII ASC, Report on Operations, Tunisia, 2, 10; Howe, Northwest Africa, 351; Craven and Cate, Army Air Forces in WWII, vol. 2, 140.

<sup>&</sup>lt;sup>40</sup> Citation of 33rd Fighter Group, 7 February 1945, GP-33-SW-AW, Oct 1942 – 10 July 1943, IRIS No. 00079425, AFHRA; 59th Fighter Squadron History, 19. 58th Fighter Squadron History, 73.

<sup>&</sup>lt;sup>41</sup> History of the 58th Fighter Squadron, p. 80, SQ-FI-58-HI 15 Jan 1941 - Dec 1943, IRIS No. 00056741, AFHRA.

<sup>&</sup>lt;sup>42</sup> Momyer Oral History, 32.

attack was one of the worst since elements of the 33rd had moved forward.<sup>43</sup> The next day, a suave General Doolittle paid Momyer and his men a visit, an impromptu courtesy call which inspired the troops.44

In addition to patrols over the airfield, 33rd pilots primarily engaged in armed reconnaissance and bomber escort missions. A number of A-20 and DB-7 medium bombers of the Forty-Seventh Light Bombardment Group shared the field at Thelepte, and the men of the 33rd escorted the medium bombers mainly on airfield and port attacks. An account from a January day in the 58th Fighter Squadron war diary encapsulates the 33rd's daily experience on the Tunisian plain:

At mid-day, the Squadron's ships join in flight with the A-20 bombers to sortie above Sousse where dock installations are pounced on by the American planes. Two trips are made to this area today as 11 and 12 P-40s maintain top-cover to the low, sweeping bombers, that leave fire blazing behind them, as they streak through flak rising like disintegrating rockets from the ground. On an hour-and-half fighter sweep down to El Guettar, the 58th pilots locate no more tanks. They circle up the coast over Sfax and above the Faid Pass, throw fire on three trucks and a trailer at the eastern end of the Pass. The struck vehicles smolder in smoke as the mission cuts back over the hills.<sup>45</sup>

It was one of these escort missions that brought Momyer more luck in the air. On the 8th of January, he led a formation of P-40s escorting A-20s in an attack on a gathering of German trucks near Gabes, just over one hundred miles to the southeast of Thelepte. Flying high above the A-20 formation, Momyer watched as four white-nosed Messerschmitts attacked the A-20s, diving at their tails. Turning into the attackers, Momyer gained the advantage and fired a heavy burst of gunfire at one of the German aircraft. The Me-109 spiraled to the ground and became Momyer's second victory of the war.<sup>46</sup>

Flying the P-40 in combat against the German aircraft required skill and strategy. Earlier in December, in their first bouts with the Germans, the

<sup>&</sup>lt;sup>43</sup> History of the 58th Fighter Squadron, p. 80, SQ-FI-58-HI Oct 1942 – Jan 1944, IRIS No. 00056743, AFHRA.

<sup>&</sup>lt;sup>44</sup> Lieutenant Colonel Vincent Sheean, "Air Strategy – Teamwork Wins Air Battles," Seattle Times, June 22, 1943.

<sup>&</sup>lt;sup>45</sup> 58th Fighter Squadron History, 77.

<sup>&</sup>lt;sup>46</sup> History of the 58th Fighter Squadron, p. 83, SQ-FI-58-HI 15 Jan 1941 – Dec 1943, IRIS No. 00056741, AFHRA.

group's pilots at Thelepte had learned important lessons. They based their flying formations on the P-40s best defense – a quick turn into the enemy. The superior climb capability of the Messerschmitts meant that the pilots structured their formations so one aviator could always search behind for an attacker.<sup>47</sup> The Messerschmitt fighters "were faster, had a better rate-of-climb and could fly higher than their Curtiss opponents."<sup>48</sup> The Focke Wulfe 190s were even more capable. Momyer later recalled the P-40 was a very good airplane if used in the conditions it what was intended for. "She's got range and guns," he said, "and at the altitudes we fly she'll turn inside a 109 or Focke-Wulfe." The P-40s usually tried to entice the Axis airplanes to battle below 12,000', where "we are hell to dogfight with," Momyer explained, "the 109's have found that out."<sup>49</sup>

Although Momyer was the group commander, he was also the group's lead tactician. Of all his aviators, Momyer had the most experience with the P-40, both in combat and in training. He had no option but to take the lead in the air as well as the ground. The survival of his men depended on it. For Momyer personally, this situation set the stage for his perspectives on leadership later in his career. He always sought a way to get into the tactics of battle – he believed good leadership required it. In the culture of a combat air organization the same requirement drove an emphasis on leading from the front of a formation of aircraft. Momyer's peers, the brigade and battalion commanders on the ground, were not expected or required to be the best riflemen or lead their soldiers in small unit tactics, but the senior Airmen in similar organizations were. This was, and is, the blessing and the bane of the development of combat leaders in the air.

Throughout January, Momyer and the rest of the 33rd aviators endured both airfield attacks at Thelepte and attacks in the air from the experienced pilots of the Luftwaffe. On the 15th of January, the 33rd saw three airfield

<sup>&</sup>lt;sup>47</sup> "The Twelfth Air Force in the North African Winter Campaign: 11 November 1942 to the Reorganization of 13 February 1943," AAFRH-14, AAF Historical Office, January 1946, p.76.

<sup>&</sup>lt;sup>48</sup> Carl Molesworth, *P-40 Warhawk vs. Bf 109: MTO 1942-44* (Osprey Publishing, 2011), 4.

<sup>&</sup>lt;sup>49</sup> John Lardner, "American Flyer's Ingenuity Bests Foe's Superior Planes," *Seattle Times*, April 30, 1943.

attacks in one day. In the first, four Me-109s strafed the field. Three hours later, eight more Messerschmitt's arrived. Later still, 10 Ju-88s descended upon Thelepte with their load of bombs. On this last attack, the 33rd was ready. Upon the alert of the approaching attackers, two 59th pilots took to the skies and met the enemy formations. They downed four enemy aircraft. As the dust settled, a third 59th pilot got airborne in his P-40 and chased down the attackers, scoring four more kills. For their brave defense of Thelepte that day, the 33rd received a Distinguished Unit Citation. By then, Craig had rated Momyer's group the most capable and reliable in the XII ASC.

Despite these accomplishments and accolades, the constant threat and stress of the airfield attacks began to take a noticeable toll on Momyer's men. The group's doctor approached both Momyer and Cochran with his concerns. Much of what he reported was not news to the two leaders. The enlisted men were so jittery that many failed to report to work. The pilots were rapidly becoming fatigued from the high pace and stress of operations at the front. The medical models for combat stress assumed that aviators flew missions and then returned to a base free from enemy attack, but without a period of normalcy between each mission, some of the pilots were beginning to crack. The doctor recommended a break for the 58th soon. Momyer and Cochran took note but there was not much they could do. The Allied ground forces needed their support.<sup>51</sup>

On January 26th, Momyer led a mission typical for the group during January. "The object was to furnish top cover for our group's troops operation in the Gafsa sector."<sup>52</sup> Momyer later expressed his frustration over these missions and a continuing absence of attacks on German oil fields. "I can recall right today," he remembered, "a German airfield at Kairouan, a German airfield at Sousse, a German airfield at Sfax, and about four others." These airfields provided bases for the aircraft that generated the attacks on Thelepte, yet, with

-

<sup>&</sup>lt;sup>50</sup> *History of the 59th Fighter Squadron*, p. 19, SQ-FI-59-HI 1 Oct 1942 – Dec 1943, IRIS No. 00056768, AFHRA.

<sup>&</sup>lt;sup>51</sup> 33rd Fighter Group Medical History, Call# GP-33-HI (FI), Jan 41 - Dec 44, IRIS# 0079380, p. 23

 $<sup>^{52}</sup>$  History of the 59th Fighter Squadron, p. 19, SQ-FI-59-HI 1 Oct 1942 – Dec 1943, IRIS No. 00056768, AFHRA.

all of the attacks that the 33rd endured, Momyer recalled there was, "no offensive actions going on against those German airfields."<sup>53</sup>

Instead, Allied attacks early in the campaign focused on direct cover for ground troops and interrupting the enemy's supply chain. Ports, roads, and shipping took the majority of the Allied effort. The Axis supply routes funneled to the area surrounding the Cap Bon peninsula of Tunisia. This left them open to attack from air bases at Malta in the southeast, bases along the African coast in the west, and Allied naval forces on all approaches. The lack of German long-range strategic aviation did not permit the Axis the same opportunity. Although the Allied supply lines covered longer distances, they were much less exposed to enemy attack.

Recognizing the great need for supplies, the Axis shifted a great deal of their air effort toward escort duty for the convoy trips from Italy. Hitler, himself, "issued specific orders regarding the strength of air escorts in the future." Already in mid-January, Von Arnim, the commander of the German Fifth Panzer Army, complained of a shortage of ammunition and inadequate supply transport facilities. He estimated the supply requirements for the combined Axis forces at 150,000 tons per month, while he thought the best they could realistically hope for was 80,000 tons. Rommel went as far to request, "In view of the precarious situation in which the Army Group now finds itself, I request an immediate decision as to the continued conduct of operations in Tunisia." Superior headquarters ordered Rommel to continue the fight. <sup>54</sup>

In late January, Eisenhower decided to keep II Corps in reserve in Tebessa. The British Eighth Army was still travelling west to catch up with Rommel in southern Tunisia near the Mareth line. Eisenhower decided to wait on pushing the II Corps forward to Gabes as called for in his initial winter campaign plans.<sup>55</sup> Almost simultaneously, the Germans in central Tunisia began to focus attacks on the French center sector. Momyer learned this from

<sup>&</sup>lt;sup>53</sup> Air Superiority in World War II and Korea (Office of Air Force History, Washington, D.C., 1983), 32-33.

<sup>&</sup>lt;sup>54</sup> Lieutenant General Hellmuth Felny, "The German Air Force in the Mediterranean Theater of War," 1955, AFHRA KH3.107-161, p. 602, 628, 631.

<sup>&</sup>lt;sup>55</sup> "The Twelfth Air Force in the North African Winter Campaign: 11 November 1942 to the Reorganization of 13 February 1943," AAFRH-14, AAF Historical Office, January 1946, p.114.

a reliable source. On the 30th of January, a French Maryland bomber circled over Thelepte and subsequently came in for a landing. As the airplane rolled slowly to a stop, French General Henry Giraud, the leader of the French forces in Tunisia, stepped out. Momyer greeted him and escorted him to the operations dugout. There, Giraud, Momyer, and Cochran poured over the maps to gain an understanding of what lie ahead. Giraud knew the reputation of the 33rd and he wanted Momyer's help.<sup>56</sup>

Eisenhower, realizing that he could no longer effectively coordinate actions from afar, placed British Army General Kenneth Anderson in charge of coordinating the three Allied sectors. Eisenhower also centralized air support for Allied ground troops by establishing an Allied Air Support Command with USAAF Brigadier General Laurence Kuter in charge under Anderson. Kuter now had centralized control of both Allied ground support aviation groups, the XII ASC and the British 242 Group. With this change, Kuter could direct more of the XII ASC and 33rd's operations toward the French sector. Freedendall's II Corps could no longer withhold air assets in reserve while other sectors required air support.<sup>57</sup>

As January turned to February, Momyer's men continued to feel the impact of combat operations at the foremost Allied field. Both the constant Axis attacks on Thelepte and flight operations under what was, for all practical purposes, Axis air superiority, took its toll on the 33rd in manpower and materiel. Momyer's P-40s were outnumbered on nearly every mission they flew. In one particularly disastrous reconnaissance mission over the battle area on February 2, six P-40s of the 59th encountered over 35 Ju-87s and Me-109s. Only one P-40 returned safely to Thelepte. It was, "a truly disastrous day." 58

Despite the Axis powers greater combat experience, the 33rd managed to achieve an exchange ratio of one downed Axis aircraft for each P-40 they lost. Although the results were the best that could be hoped for in the given

<sup>&</sup>lt;sup>56</sup> 33rd Fighter Group Medical History, Call# GP-33-HI (FI), Jan 41 - Dec 44, IRIS# 0079380, p. 24

<sup>&</sup>lt;sup>57</sup> Craven and Cate, *Army Air Forces in WWII*, vol. 2, 140; Howe, *Northwest Africa*, 383; Mortensen, *A Pattern for Joint Operations*, 68; H.S. Warwick, "XII Air Support Command in the Tunisian Campaign," p. 2, 655.01-2, IRIS No. 00246459, AFHRA.

<sup>&</sup>lt;sup>58</sup> *History of the 59th Fighter Squadron*, p. 24, SQ-FI-59-HI 1 Oct 1942 – Dec 1943, IRIS No. 00056768, AFHRA.

conditions, it was not a sustainable tempo. As the official history put it, the XII ASC's "most experienced and most effective fighter unit had finally either to receive replacements or be relieved." On February 9th, the 31st Fighter Group arrived at Thelepte with Spitfires. Momyer received orders to withdraw the 33rd from the front for reorganization and a well-deserved rest. They were not sorry to go. To the 31st, the 59th historian wrote, "They have our deepest sympathy and sincerest best wishes."

Traveling by way of Youks Les Bains field in Algeria where the 60th Fighter Squadron was operating, the men of the 33rd looked forward to a break in the action. During the 33rd's absence from Tunisia, the Allied air forces were reorganized yet again. Earlier in January, Allied military and political leaders met at Casablanca to discuss war strategy. At the conference, General Eisenhower presented his plans for the reorganization of the Allied forces. Eisenhower noted that since Montgomery was driving Rommel into southern Tunisia, the two fronts in North Africa were becoming one and the command organization should reflect the change. Eisenhower set up three subordinate commanders for land, sea, and air. General Sir Harold R. L. G. Alexander took charge of the land component with the formation of the Allied 18th Army Group. Admiral Sir Andrew Cunningham became the commander in chief, Allied Naval Forces, Mediterranean, and Eisenhower placed Air Chief Marshal Sir Arthur W. Tedder in charge of the new Mediterranean Air Command. Reporting to Tedder, General Spaatz commanded the subordinate Northwest African Air Forces. Under the Northwest African Air Forces were three subordinate commands: Strategic Air Force, Coastal Air Force, and Tactical Air Force. Air Marshal Sir Arthur Coningham, highly experienced from British operations in the Western Desert and a well-known expert on tactical airpower, became the commander of the Northwest African Tactical Air Force (NATAF).

-

<sup>&</sup>lt;sup>59</sup> Craven and Cate, *The Army Air Forces in World War II, Europe: Torch to Pointblank* (Office of Air Force History, Washington, D.C., 1983), 143.

<sup>&</sup>lt;sup>60</sup> 59th Fighter Squadron History, 23; HQ XII ASC, Report on Operations, Tunisia, 3; Warwick, "XII Air Support Command in the Tunisian Campaign," 5; 58th Fighter Squadron History, 99.

<sup>&</sup>lt;sup>61</sup> *History of the 59th Fighter Squadron*, p. 25, SQ-FI-59-HI 1 Oct 1942 – Dec 1943, IRIS No. 00056768, AFHRA.

Under Coningham's command Eisenhower combined the XII ASC, the 242 Group, the Tactical Bomber Force, and the Western Desert Air Force.

These events changed the structure of air operations within Momyer's orbit. In effect, the new set-up meant "Eighteenth Army Group and NATAF would follow the successful pattern established by the British Eighth Army and the Western Desert Air Force in their drive from El Alamein through Tripoli," Kuter later recalled. Kuter, now the American Deputy Commander of NATAF under Coningham, also remembered Eisenhower directed, "the air and ground commanders would be quartered together, plan together, and use the same operations center . . . General Alexander would be the final authority on ground Force matters and Air Marshal Coningham would be the final authority on air force matters." With these new lines of authority formalized, the 33rd came back into the heat of the action. <sup>62</sup> Upon hearing the news, the serious Momyer likely brandished a rare smile. He knew Coningham's reputation and had witnessed the impact of his leadership in the Western Desert in 1941. <sup>63</sup>

The XII ASC also gained a new unit, the 3rd Air Defense Wing. Momyer now looked forward to operating with an air defense system capable of providing warning for impending enemy airfield attacks and the location of enemy fighters for his airborne aircraft. Coningham ordered those units to set up systems to provide information from the early warning nets to the fighter operations rooms. This system was a vast improvement from the days of visual observation at Thelepte.<sup>64</sup>

Upon his return to the front, after only a month away, Momyer found the war drastically changed. Allied air and sea power had taken a substantive toll on the Axis supply routes. While Axis supplies were decimated, the Allies continued to build up their forces. By early March it was apparent that the Axis forces were fighting a losing battle in Tunisia, and it was only a matter of time before they would be expelled from North Africa. The Axis, however,

<sup>&</sup>lt;sup>62</sup> General Laurence S. Kuter, USAF (Ret.), "Goddammit, Georgie!" *AIR FORCE Magazine*, February 1973, 55.

<sup>&</sup>lt;sup>63</sup> General of the Army Dwight D. Eisenhower's Report to the CCS on Operations in Mediterranean Area, 1942-44.

<sup>&</sup>lt;sup>64</sup> Headquarters XII ASC, Report on Operations, Tunisia, 13 January 1943 – 9 April 1943, p. 7, 651.3069-1, IRIS No. 00246452, AFHRA; Air Marshal Coningham, Air Officer Commanding, Northwest Africa Tactical Air Force, "General Operational Directive, 20 February 1943," p. 1, 614.201-2, AFHRA.

continued a ferocious fight. With the Axis on a slow withdrawal toward Tunis, they lost airfield after airfield to Allied troops. As these airfields fell out of Axis hands, the Northwest Africa Air Forces moved in.<sup>65</sup>

After the Allied lines pushed to the Western Dorsal at the end of March, the XII ASC again took control of Momyer's men. Once more, the 33rd made their home at the most forward of all Allied airfields. This time it was Sbeitla, a field approximately thirty-five miles east of Thelepte. In this phase of the Tunisian campaign, Momyer began to see the effects of the new air organization. In orders to his commanders, Coningham stressed the importance of air superiority over the battle area. Specifically, Coningham stated the objective was to "provide maximum support for air operations" with two supporting courses of action: "(1) A continual offensive against the enemy in the air, and (2) Sustained attacks on enemy airfields." Coningham foresaw these operations taking place in cooperation with the Strategic Air Forces.

Momyer later remembered his first interaction with Coningham. Shortly after Momyer arrived at Sbeitla, and a few days after his promotion to full colonel, Coningham paid a visit. "Colonel," Coningham said, "the first thing we are going to do is get out and destroy the German air force," Adding when "we have destroyed the German Air Force in North Africa, we will do all the air support and anything else the Army wants. But until we get those airfields and get those German airplanes off our back, we are not going to do anything else."<sup>67</sup> This exhortation for what later became a central tenet of airpower was music to Momyer's ears.

The XII ASC translated Coningham's orders into objectives for the 33rd Fighter Group. As the battle for air superiority raged, the XII ASC and the 33rd also supported a major allied offensive. In March, General Alexander put II Corps, now under the command of Lieutenant General Patton, into action against Rommel from the east while Montgomery's Eighth Army pushed up against the Mareth line from the south. Some of the most intense action of this

<sup>&</sup>lt;sup>65</sup> Vincent Orange, Coningham: A Biography of Air Marshal Sir Arthur Coningham, KCB, KBE, DSO, MC, DFC, AFC (London: Methuen London, 1990), 143.

<sup>66</sup> Coningham, "General Operational Directive," 1.

 $<sup>^{67}</sup>$  Air Superiority in World War II and Korea (Office of Air Force History, Washington, D.C., 1983), 32-33

campaign occurred between Patton's and Rommel's forces near El Guettar in late March.<sup>68</sup>

In the late afternoon of March 31st, Momyer prepared to launch on a large mission in support of Allied ground forces at El Guettar. In the lead of a large force of 36 P-40s, Momyer likely overflew his future commander in Vietnam, Colonel William C. Westmoreland, who then served as a battalion commander in the battles waged below. Momyer recalled the sortie years later, "The Germans had come in with this formation of Stukas to hit the tank formation that we had. After I made the identity, I told the wingman that we would slide up the back end of the formation and work our way through. So, with that I started out to shoot the Stukas, and I shot four Stukas down real quick. Bang! Bang!"69

Momyer's personal recollection does not fully capture the heroism of his actions. He first led his flight in an attack on twelve Me-109s. Emerging from this fight, Momyer spotted a formation of eighteen Stukas escorted by three more Me-109s. In the turn to attack, Momyer's wingman was hit by enemy fire and could not continue. Recognizing that the enemy formation had the Allied ground forces in their sights, Momyer attacked the large formation as a single aircraft. The account from another P-40 above the fight confirmed Momyer destroyed four aircraft and damaged seven. He continued the attack on the enemy formation until his fuel ran dangerously low. Only then did he turn towards Sbeitla. A barrage of enemy anti-aircraft fire burst all around as he sped for home. For his actions that day, Momyer received the Distinguished Service Cross, second only to the Medal of Honor in the U.S. Army hierarchy of awards for gallantry and risk of life in combat.<sup>70</sup>

In the skies of combat, downing five or more airplanes bore special significance. Taken in the large scheme of the overall Allied effort in North Africa it might have a very small impact. "The whole ace system is slightly

<sup>&</sup>lt;sup>68</sup> George F. Howe, *Northwest Africa: Seizing the Initiative in the West* (Washington, D.C.: Office of the Chief of Military History, Department of the Army, 1957), 564-572.

 $<sup>^{69}</sup>$  General William W. Momyer Oral History, by Lt Col John N. Dick, 31 January 1977, p. 34, K239.0512-1068, IRIS No. 1029788, AFHRA.

<sup>&</sup>lt;sup>70</sup> Headquarters, U.S. Army-North African Theater of Operations, General Orders No. 43 (June 26, 1943), Distinguished Service Cross Citation for Colonel (Air Corps) William Wallace Momyer, for actions March 31, 1943.

unsound," wrote one observant reporter, "as an index of air talent." He noted it ignored a "great many tactical, strategical and mechanical considerations," as well as "the work of ground crews." But since World War I, it also bestowed a certain mystique to the man holding the title. Momyer now claimed that title. Success of the Army Air Force business relied on a blend of man and machine. Each aerial victory testified to an aviator's level of mastery of that blend against an enemy who sought to master the same. Culturally, the service greatly valued technical proficiency. Eight victories spoke loudly to Momyer's proficiency and his standing within the environs of that culture. The title 'Ace' followed him through the rest of his career.

Aerial victories also made for good press. On April 1, 1943, the headline on page three of the New York Times read, "U.S. Group in Tunisia Bags 13 Nazi Planes: Unit Has Score of 34 Since Mar. 25 – Colonel Leads With Eight." The first line of the article told the story well: "Led by the blazing guns of their 28-year-old commander, Colonel William W. Momyer of Seattle, who knocked down four Stukas, a group of P-40 pilots bagged thirteen Nazi planes in fighter sweeps yesterday and today, raising their victory string to thirty-four since March 25."<sup>72</sup> In another even more colorful account, a reporter noted, "Colonel Momyer is partial to Stukas," simply because, they "are the tenderest delicacy in the African air." Even more dramatic, the account read, "at one point in the combat he used the Stukas to cover himself from the attack of two protecting Messerschmitts . . . It was like playing chess with loaded pieces and Colonel Momyer did not even burn his fingers."<sup>73</sup>

Momyer's no-nonsense manner as a commander bore testament to his independent upbringing. "Colonel Momyer has stern views on 'scores," read one account, "and does not approve of frolicking in the air." The day after his Stuka extravaganza, Momyer reminded the men to, "stick to the business of

<sup>71</sup> John Lardner, "It's 'Aces' Up When Scoring American Victories in Air," *Seattle Daily Times*, June 29, 1943.

<sup>&</sup>lt;sup>72</sup> Associated Press, "U.S. Group in Tunisia Bags 13 Nazi Planes," *New York Times*, 3 April 1943, 3.

<sup>&</sup>lt;sup>73</sup> John Lardner, "Germans No Sitting Birds – Plenty Tough, Says Colonel Momyer," *Seattle Times*, April 12, 1943.

your flight and do not go looking for trouble."<sup>74</sup> As the group commander, Momyer felt it important to provide direction to his men. "They're just a bunch of hard hitting kids looking for trouble and finding it," Momyer told a reporter. Momyer believed his men looked for trouble "on the theory that the sooner they spot it and give it the works, the sooner we will get the hell out of here and go home."<sup>75</sup>

Amazingly, one day after the 33rd attacked enemy forces with fragmentation bombs and accounted for 6 Me-109s and 4 Stukas well within view of Allied ground forces, Patton issued one of the more controversial situation reports of the Tunisian campaign. On April 1st, Patton reported a "Total lack of air cover for our units has allowed German Air Forces to operate almost at will." Patton was frustrated – his beloved personal aide had been killed in an Axis air attack - but he was wrong. In response, Coningham told Patton that if his report was, "in earnest and balanced against facts, it can only be assumed that II Corps personnel concerned are not battleworthy in terms of present operations . . . 12th ASC have been instructed not to allow their brilliant and conscientious air support of II Corps to be affected by this false cry of wolf." This episode was not only an unseemly tiff between senior air and ground commanders but also irritated the carefully nurtured relations between British and American forces. Tedder had to intervene to resolve the situation in a personal meeting between Patton and Coningham."

The news of this meeting travelled far and wide through the area of operations. Undoubtedly with each telling the details became more vivid, the language more vibrant. For a young colonel on the front lines of air combat in Tunisia, the episode inspired the fighting spirit he had known since youth. Momyer believed cooperation with the ground forces would win the day, but he

7/

<sup>&</sup>lt;sup>74</sup> John Lardner, "It's 'Aces' Up When Scoring American Victories in Air," *Seattle Daily Times*, June 29, 1943.

<sup>&</sup>lt;sup>75</sup> "It's 'Kill or Get Killed' In Africa, Says Col. Momyer," Seattle Times, April 14, 1943.

 $<sup>^{76}</sup>$  Headquarters XII ASC, Daily Intelligence Summary of Operations, 31 March 1943, p. 1, 651.3071, IRIS No. 00246453, AFHRA.

<sup>&</sup>lt;sup>77</sup> As quoted in Vincent Orange, *Coningham: A Biography of Sir Arthur Coningham*, (Methuen London, 1990), 146.

<sup>&</sup>lt;sup>78</sup> As quoted in Vincent Orange, *Coningham*,: *A Biography of Sir Arthur Coningham*, (Methuen London, 1990),147.

<sup>&</sup>lt;sup>79</sup> As quoted in Vincent Orange, *Coningham*,: *A Biography of Sir Arthur Coningham*, (Methuen London, 1990),148.

also felt strongly that air leaders had to stand their ground when confronted by the animated discussions which sometimes arose over the natural tensions inherent in the debate over the most effective application of airpower in combat. Most importantly, Momyer learned the stand had to be founded upon facts and proven performance. Like Coningham, Momyer would one day make airpower's case as a senior air leader in combat.

The 33rd fought hard throughout their time at Sbeitla. When asked about Momyer's leadership and the group's record, one pilot said, "It's not an advertisement for the plane we fly or for us," rather, "it's an ad for the colonel and the way he keeps his blood circulating." When he was not in the air, Momyer spent his time "checking reconnaissance reports in the subterranean field office." During April, the Axis was on the move north and east and Momyer coordinated knowledge of their movements with the activities of the group while adhering to XII ASC objectives. Once, while a reporter observed these activities, Momyer received a call giving the location of Axis trucks on the move. "Colonel Momyer did not move his eyes, which were glued to a map, 'Pass the word!' he said, 'And tell our guys if they miss 'em they're to have a quick look up the Pichon-Fondouk Road. The trucks may try to duck for cover up there. Comb the roads close both ways from the fork!" Later in the day, the reporter heard the trucks tried "the maneuver Colonel Momyer forewarned of and were blasted on the spot he named."81

The 33rd closed out operations at Sbeitla in a much healthier condition than when they left Thelepte. Statistically, the XII ASC now traded approximately one of its aircraft for every two and a half Axis aircraft. During this phase of operations, the Northwest African Air Forces effectively gained air superiority in Tunisia. Taking a great deal of the credit for this outcome, the XII ASC generated a 460% increase in fighter sweep sorties from earlier in the battle. This reflected not only a change in strategy and command and control but also a change in the number of aircraft available to the Allies. The supremacy in resources sustained continuing victories in the air as well as the

<sup>80</sup> John Lardner, "Germans No Sitting Birds – Plenty Tough, Says Colonel Momyer," *Seattle Times*, April 12, 1943.

<sup>81</sup> John Lardner, "Germans No Sitting Birds – Plenty Tough, Says Colonel Momyer," Seattle Times, April 12, 1943.

ground. On April 12th, the 33rd moved to Ebba Ksour, Tunisia, fifty miles to the north of Sbeitla. The move followed the continued advance of Allied troops as they pushed the Axis forces north and east.<sup>82</sup>

Later, Heinz Bar, a German ace who survived Tunisia to become the top jet ace of World War II in the German Me-262, recalled the Allied air superiority campaign. "We were bombed eight times a day," he said, "we had no aircraft and no fuel and when one of the old-timers was put out of action, there was no one to take his place." Further, "the many young men, still almost teenagers, who came to us half-trained, were very soon shot out of the sky."<sup>83</sup> The men of the Luftwaffe fought valiantly, but it was a losing battle.

The period from April 10th to May 13th marked the final phase of the XII ASC's Tunisian Campaign. The Allies sought to conclude the campaign in Northwest Africa as quickly as possible, so they could attack Sicily and then move on to the invasion of northwest Europe before the end of 1943. With these ambitious goals in mind, Alexander shifted the entire II Corps, now under the command of Major General Omar N. Bradley, to the northern portion of the Allied lines and placed it under Anderson's First Army. Montgomery continued to push from the south with the Eighth Army. The Allies were quickly pushing the Axis forces into the far northeast corner of Tunisia. XII ASC and the British 242 Group were to support the main effort of Anderson's First Army to destroy the Axis forces in Tunisia and capture Tunis and Bizerte.<sup>84</sup>

In this last phase of the campaign, Coningham placed even greater stress on air superiority. With the Axis in retreat, Coningham planned to precede the Allied ground offensive with air operations, "directed to the weakening and, if possible, the elimination of this fighter force." Reflecting this guidance, the XII ASC flew four times as many fighter sweeps as it had in March and seven times as many as in December and January. After the focused campaign for air

<sup>&</sup>lt;sup>82</sup> H.S. Warwick, "XII Air Support Command in the Tunisian Campaign," p. 5, 655.01-2, IRIS No. 00246459, AFHRA.

<sup>83</sup> Franz Kurowski, *Luftwaffe Aces: German Combat Pilots of World War II* (Stackpole Books, Mechanicsburg, Virginia, 2004), 84.

<sup>&</sup>lt;sup>84</sup> Howe, *Northwest Africa*, 595-608; Headquarters XII Air Support Command, "Report of Operations, Tunisian Campaign – 10 April to 13 May," p. 1, 651.306-1, IRIS No. 00246449, AFHRA.

<sup>&</sup>lt;sup>85</sup> Headquarters, Northwest African Tactical Air Force, "The Implications of the Present Situation," 17 April 1943, p. 1, 614.316, IRIS No. 00242503, AFHRA.

superiority, Coningham planned to turn the entire air effort to support of the land forces. In the campaign for air superiority, HQ XII ASC employed Momyer's P-40s almost exclusively as fighter-bombers to attack airfields, vehicle traffic, gun installations, and enemy force concentrations. The group flew 1,659 sorties in this capacity as opposed to 243 in fighter sweeps. There were now six squadrons of Spitfires under the XII ASC to support the fighter sweep mission.<sup>86</sup>

Many years after the war, General Laurence Kuter recalled the airpower experience in North Africa. He was, and would continue to be, instrumental in the inner circles of the Army Air Forces. He remembered Momyer from this period as a great leader. Kuter later told an interviewer, although Momyer and other group commanders were, "not in the [NATAF] headquarters," they were, "keenly aware of everything that was going on regarding the tactical air concept and their role in making it work."

As operations neared an end in early May, Brigadier General Elwood Quesada flew in to pay a visit to Momyer and the group. Now the deputy commanding general of the Northwest African Coastal Air Force, Quesada listened to Momyer's stories of the accomplishments of the 33rd over the past six months with a great deal of pride. Quesada found great satisfaction in the achievements of his hand-picked successor. As its first commander, Quesada would always have an affinity for the 33rd.88

A day after Quesada's visit, Momyer led one of his last large missions of the Tunisian campaign. Sixteen P-40s took to the skies to attack the El Aouina airport in Tunis. There, the Axis forces were loading transports to evacuate men and equipment from the peninsula. Momyer's pilots covered the one hundred mile distance with their eyes peeled for enemy air activity, yet none existed. Many of the Luftwaffe's fighter squadrons were now out of the fight. As the target grew close, anti-aircraft fire from the ground filled the skies. Momyer led his men through the fire to strafe and destroy fifteen enemy transports on the ground. After the attack, they returned to Ebba Ksour one

<sup>&</sup>lt;sup>86</sup> HQ NATAF, "Implications of Present Situation," 2; Warwick, "XII ASC in the Tunisian Campaign," 2.

<sup>&</sup>lt;sup>87</sup> General Laurence S. Kuter Oral History, by Hugh N. Ahmann and Tom Sturn, 30 September – 3 October 1974, p. 304, K239.0512-810, IRIS No. 01015373, AFHRA. <sup>88</sup> 59th Fighter Squadron History, 40.

less. A young lieutenant's aircraft was hit by the massive amounts of fire over Tunis. Thankfully, someone in the formation saw him bail out of the stricken airplane. Badly burned, he was later found by British troops, who delivered him to a field hospital for treatment.<sup>89</sup>

Due at least in part to the integrated application of air and ground operations, the First Army broke through the Axis lines and took Tunis and Bizerte by the same day that Momyer and his men attacked Tunis. While the Axis forces attempted to evacuate, Momyer's men continued to harass the Axis forces with attacks on boats, supplies, and equipment. On May 13th, the Axis commander in North Africa, General von Arnim, accepted the surrender terms of the Eighth Army, officially ending the hostilities in Tunisia. "It's a quiet afternoon," the 58th historian wrote in the final entry on the group's operations in Tunisia, "but there is little token that there is nothing left to the aerial warfare. Two planes play lazy games of looping in the sky above the field, coming down to buzz the ground, then, rolling upward. The bomb-line disappears from the Intelligence map at Operations. The 58th members merely lie on the sunny grass saying: 'So, it comes like this.'" 90

Years later, while Momyer was commanding the Tactical Air Command and nearing retirement, he received a letter from Colonel Ben R. Blair. Blair had served in the 33rd during the days at Thelepte. Blair wrote that Momyer had come a long way since the days in North Africa, but in his view, that was where it all started. In his return letter, Momyer agreed. "This was the beginning of trying to find out how to fight an air force," he wrote, "I have looked back on those days with a great deal of pleasure. For my part, they were the most trying and demanding times I have been through, but every day something was learned on how to fight airpower . . . I wouldn't trade anyone for that experience."91

It is nearly impossible to over-exaggerate the impact the campaign in North Africa had on Momyer and his fellow Airmen. North Africa was the first

<sup>89 58</sup>th Fighter Squadron History, 120.

<sup>90 58</sup>th Fighter Squadron History, 122.

<sup>&</sup>lt;sup>91</sup> Colonel Ben R. Blair, USAF (Ret) to General William W. Momyer, Commander, TAC, Letter, 19 July 1973; General William W. Momyer, Commander, TAC to Colonel Ben R. Blair, USAF (Ret), Letter, 28 August 1973, 168.7041-67, IRIS No. 100117, from General Momyer Papers, AFHRA.

major campaign of World War II where Army Air Forces operated in concert with their fellow Americans in the ground battle. Few expected perfection, and pessimists were not disappointed. It did not go well at first, in either domain. Then a complex set of variables began to play out. Americans gained experience and became a worthy ally for their British comrades. The funneled supply lines and heavy logistical demands of the German effort in Tunisia created an immense susceptibility to the powers of aerial interdiction. As interdiction efforts took effect on their supply lines, the Axis powers struggled to replace men and equipment at a rate that matched the attrition rates of sustained combat. The Luftwaffe was also heavily engaged on three fronts simultaneously. The American war machine, meanwhile, operated at full power, focused on the efforts in North Africa. Men and equipment poured into the Mediterranean theater.

For Momyer, an Airman operating on the front lines, these contributing factors mattered but were less obvious then the one he knew best, the change in the Allied command and control structure with a commensurate change in tactical air operations and strategy. Momyer commanded a group that literally fought for survival on the plains and skies of Tunisia in December 1942 and January 1943. There is no doubt that the command restructure and the prioritization of air superiority made a difference as the tide turned in March, but it was the timing of this change that found synergy in the culmination of all the factors of victory. The resulting power booted the Axis forces from North Africa. Not surprisingly, Momyer would credit a substantive portion of the turn-around to the command of Tedder, Spaatz, and most importantly, Coningham. Among Airmen, he was not alone. For most pilots that served there, the North African campaign would have an outsized effect on their philosophy and practice of air war.

## Chapter 4

## On To Italy

Momyer and his men had little time for the full enjoyment of the victory in Tunisia. A methodical, stair step invasion of Italy was ready for execution. For the next few months, Momyer witnessed more innovation in the arena of airpower. He saw, and participated in, an enemy surrender without an American soldier setting foot on hostile soil as well as the evolving application of airpower in amphibious operations. He participated in an air operation from a beach in Italy that combined heavy bombers in close coordination with pursuit aircraft in a way that showed the importance of having the ability to mass air forces where the situation required. As a leader, Momyer also witnessed the impact of combat fatigue and ended up on the front lines of the fight for racial equality in military service. While Tunisia was Momyer's trial by fire, the quest for Italy was the campaign that seasoned Momyer as a combat leader.

As soon as the Allied forces drove the Axis powers from Tunisia, they began repositioning men and equipment in preparations for the invasion of Sicily. In support of Operation HUSKY, the forces of the Northwest African Tactical Air Forces needed airfields close enough to Sicily for single engine aircraft to participate in the upcoming operations. The U.S. Navy could not provide the eight auxiliary aircraft carriers required to support a sea-based operation, and the British islands of Malta and Gozo did not have enough room for additional aircraft for the HUSKY operation. These factors shifted the Allies attention to the Italian held island of Pantelleria.

The capture of the airfield on Pantelleria could provide room for another fighter group to move within sixty miles of Sicily. A volcanic island with foreboding cliffs and over 100 gun emplacements, a full amphibious assault on Pantelleria seemed likely to be difficult and costly. Eisenhower decided, therefore, to attempt to weaken the island by air and sea attacks before attempting an invasion. Again building a combined command, Eisenhower assigned responsibility for air to Lieutenant General Spaatz, land to Major General Clutterbuck of the British I Infantry Division, and sea to Rear Admiral R.R. McGrigor of the Royal Navy. Under the campaign plan, code-named Operation CORKSCREW, the 33rd moved to Menzel Temime, an airfield on the

Cap Bon peninsula of Tunisia, on May 20, 1943.<sup>1</sup> That same day, Momyer led twelve P-40s in a reconnaissance mission over their new objective. During the one-hour mission, they received "heavy, but inaccurate flak." The sortie was the first of many that were flown almost entirely over water.<sup>2</sup>

For the air assault on Pantelleria, the XII ASC once again took control of the 33rd. Now comfortable in their role as fighter-bombers, the 33rd's pilots were primarily responsible for neutralizing the coastal and anti-aircraft defenses of the island. In addition to the 58th, 59th, and 60th Fighter Squadrons, Lieutenant Colonel Benjamin O. Davis, Jr. and the men of the first all-black Army Air Forces combat fighter unit, the 99th Fighter Squadron, joined Momyer's 33rd Fighter Group for the attack.

The 99th had arrived in North Africa via an eight-day cruise across the Atlantic on April 24, 1943.<sup>3</sup> After spending a few days in Casablanca, the squadron set out for Oued N'Ja, French Morocco. There, the men polished their combat skills in their new P-40 aircraft. As Lieutenant Colonel Davis later remembered, "Our equipment was the best. We ferried in twenty-seven brand new P-40s and all of us experienced for the first time the thrill of flying a brand new airplane." While the 99th was at the training field, three P-40 combat veterans visited for a week to pass on the lessons learned from many months of combat. Major Philip Cochran, a tried and true air warrior of the 33rd Fighter Group, was among these veterans.<sup>5</sup>

One of the squadron pilots later recalled Cochran's entrance. "So he came over to our air base and he cruised up in a jeep in a mixed uniform. He had on a poplin shirt and winter trousers, and a garrison cap." Cochran was already one of the war's most notorious combat veteran aviators. His dress depicted a man who knew his business, but had no time for formalities. This

<sup>&</sup>lt;sup>1</sup> Wesley Frank Craven and James Lea Cate, ed., *The Army Air Forces in World War II*, vol. 2, *Europe: Torch to Pointblank August 1942 to December 1943* (Chicago: University of Chicago Press, 1949), 415-422.

<sup>&</sup>lt;sup>2</sup> 58th Fighter Squadron History, 124.

<sup>&</sup>lt;sup>3</sup> Daniel L. Haulman, "Tuskegee Airmen Chronology," Organizational History Branch, AFHRA, Aug 18, 2011, p. 9.

<sup>&</sup>lt;sup>4</sup> Lieutenant Colonel Benjamin O. Davis as quoted in Lynn M. Homan and Thomas Reilly, *Black Knights: The Story of the Tuskegee Airmen* (Pelican Publishing, Gretna, Louisiana, 2001), 82.

<sup>&</sup>lt;sup>5</sup> Charles W. Dryden, *A-Train: Memoirs of a Tuskegee Airman*, (University of Alabama Press, 1997), 118-120.

characteristic became even clearer when Cochran addressed the first men he saw. "Where's Davis," he said, "go and get Davis." Lieutenant Colonel Davis was superior in rank to Major Cochran, but characteristically, Cochran did not think twice about asking a superior officer to come to him. Whether it was a case of prejudice, or the actions of a notoriously bold aviator, the Tuskegee graduates were taken aback.<sup>6</sup>

If Lieutenant Colonel Davis were offended, he quickly accepted Cochran's behavior as the nature of the business. "Cochran," Davis remembered, "was our most capable instructor. He imbued all of us with some of his own very remarkable fighting spirit, and in addition to that he taught us what to do and what not to do in aerial combat." One of the most valuable lessons Cochran taught the 99th was how to make the most of the capabilities of the P-40. "So all you have to do when you get jumped by an Me-109 or a Focke Wulfe," Cochran told them, "is to get into a tight turn, reef it in as tight as you can without stalling, and just wait him out. If he tries to stay with you in the turn you will eventually end up on his tail."

Cochran also taught the men the art of dive-bombing. Although fighter pilots wanted most to fight other aircraft, it was bombs dropped on the targets that often had the most impact on the campaigns fought on the ground. This focus on dive bombing did not sit well with some of the 99th pilots. Reflecting back on the dive-bombing portion of the training, one pilot remembered, "one of the things he [Cochran] did to start us off on a wayward journey was to mark us as natural born dive-bombers . . . that's where they kept us, down in the ditches, doing the dirty work, the short calls."9

After the in-depth combat training, the 99th felt well-prepared to go to battle. "With such information, and many other tidbits of tactics and

<sup>&</sup>lt;sup>6</sup> Captain Louis R. Purnell as quoted in Lynn M. Homan and Thomas Reilly, *Black Knights: The Story of the Tuskegee Airmen* (Pelican Publishing, Gretna, Louisiana, 2001), 84

<sup>&</sup>lt;sup>7</sup> Lieutenant Colonel Benjamin O. Davis as quoted in Lynn M. Homan and Thomas Reilly, *Black Knights: The Story of the Tuskegee Airmen* (Pelican Publishing, Gretna, Louisiana, 2001), 82.

<sup>&</sup>lt;sup>8</sup> Cochran as quoted in Charles W. Dryden, *A-Train: Memoirs of a Tuskegee Airman*, (University of Alabama Press, 1997), 120.

<sup>&</sup>lt;sup>9</sup> Captain Louis R. Purnell as quoted in Lynn M. Homan and Thomas Reilly, *Black Knights: The Story of the Tuskegee Airmen* (Pelican Publishing, Gretna, Louisiana, 2001), 85.

techniques of survival in aerial combat, I felt more than ever ready for my baptism of fire," remembered one aviator. <sup>10</sup> Recalling the skills of their instructors, Lieutenant Colonel Davis remembered, "these officers worked unceasingly to make us ready for the real test and all of us felt very grateful for their efforts." On the morning of May 30th, the men of the 99th started up their P-40s for a flight across North Africa. They were on the way to the Cap Bon peninsula to join the squadrons of the 33rd Fighter Group for the assault on Pantelleria.

Since those first missions toward the end of May, the 33rd had spent day after day in missions over Pantelleria. Throughout the rest of May, they dropped bombs on the island but saw no enemy air activity. On June 2nd, the men of the 99th flew their first combat mission with the 33rd. One of the 99th pilots could later recite verbatim the plausibly derisive early morning briefing that preceded the flight and later became the stuff of movie legend: "You boys keep up." Despite the less than extensive briefing, the flight went without a hitch. 14

Momyer's leadership in the air continued over Pantelleria. On June 7th, he led a 12-ship mission of P-40s from the 60th Fighter Squadron on another fighter-bomber mission against enemy gun emplacements on the island, taking some of the newest members of the 33rd into combat. As they approached the island, six Me-109s, four FW-190s, and four Machi 202s attacked the formation from above. Momyer's description of the battle displays his great care for the men of the 33rd. "I had to keep them together," Momyer recalled, "to get back out of there, we couldn't be separated. We started at about 10,000 feet, and we ended up clear down on the water. I can still see those twenty-millimeter shells breaking all around the water. All I was trying to do was get these guys out of

\_

<sup>&</sup>lt;sup>10</sup> Charles W. Dryden, *A-Train: Memoirs of a Tuskegee Airman*, (University of Alabama Press, 1997), 120.

<sup>&</sup>lt;sup>11</sup> Lieutenant Colonel Benjamin O. Davis as quoted in Lynn M. Homan and Thomas Reilly, *Black Knights: The Story of the Tuskegee Airmen* (Pelican Publishing, Gretna, Louisiana, 2001), 84.

<sup>&</sup>lt;sup>12</sup> History of the 58th Fighter Squadron, 125-126.

<sup>&</sup>lt;sup>13</sup> History of the 58th Fighter Squadron, 126; Lieutenant Spann Watson as quoted in J. Todd Moye, Freedom Flyers: The Tuskegee Airmen of World War II (Oxford University Press, New York, 2010), 99.

<sup>&</sup>lt;sup>14</sup> History of the 58th Fighter Squadron, 126.

combat and back home safely."<sup>15</sup> To his credit, Momyer brought twelve P-40s back to the field. On that same day, the pilots and crews of 86 B-25s, 78 B-26s, 60 B-17s, 41 P-38s, 35 A-20s, 24 British Bostons, 22 British Baltimores, 16 A-36s, 9 British Hurricanes, and 7 other P-40s dropped almost 597 tons of bombs on the island. This barrage led to Momyer's next mission, where three of his pilots dropped 'call for surrender' notes at key locations over the airfield on Pantelleria.<sup>16</sup>

The men of the 99th got their first sight of enemy fighters on June 9th. On the third mission of the day, eighteen P-40s were to escort twelve bombers over the island. The 99th Fighter Squadron supplied six P-40s to the mission, with Lieutenant Charles Dryden in the lead of their formation. The six men guarded the bombers in a line-abreast formation, just as Cochran instructed. As the men looked around for enemy fighters, a glint appeared on the horizon. As Dryden remembered, "Suddenly facing the thirty-six .50 caliber machine guns of our flight, the attack planes scattered. So did we as we took off after them." The chase did not produce a victory but one of the men did get in position to turn his guns on an enemy aircraft. Unfortunately, he could not confirm if the smoking plane escaped from the scene or crashed into the sea. No shoot down could be confirmed. So

The historic first made headlines back in the states. In an Associated Press article titled "Negro Pilots Praised for Aerial Combat," Secretary of War Henry L. Stimson said the 99th had, "weathered its first aerial combat test very creditably." As the article explained, in a "lively engagement, the American negro pilots damaged two of the German fighters and forced the remainder to retreat." Although their formation split apart during the fight, Dryden brought them back together before returning to base. Later, the break-up of the flight upon gaining sight of the enemy provided material for a negative report of their combat performance. "The truth of the matter," Dryden recalled

-

<sup>&</sup>lt;sup>15</sup> Momyer Oral History, 36; *History of the 60th Fighter Squadron*, 57.

<sup>&</sup>lt;sup>16</sup> History of the 60th Fighter Squadron, 57.

<sup>&</sup>lt;sup>17</sup> History of the 60th Fighter Squadron, 58.

<sup>&</sup>lt;sup>18</sup> Charles W. Dryden, *A-Train: Memoirs of a Tuskegee Airman*, (University of Alabama Press, 1997), 120.

<sup>&</sup>lt;sup>19</sup> "Negro Pilots Praised for Aerial Combat," Lubbock Morning Avalanche, June 25, 1943.

justifying the break-up of the formation, "is that each man was eagerly trying to be the first to down an enemy."<sup>20</sup>

On June 11th, as the men of Clutterbuck's infantry division hit the beach in CORKSCREW's amphibious landing, sailors offshore noted a white flag being raised over the island. Admiral Pavesi, the Italian military governor of Pantelleria, had informed Mussolini by telegram that the island was a lost cause. Pavesi pled for a show of mercy for the civilian population of the island. Mussolini agreed and the flag went up on the antenna of the island's only radio station building.<sup>21</sup> The lack of supplies and low morale of the Italians after days of bombing resulted in conquest without a fight on the ground. Momyer's recollection of the battle encapsulates the way most Airmen felt at the time, "Pantelleria is the only place that I know of in World War II that was captured without invading."<sup>22</sup>

Over the course of the assault on Pantelleria, Momyer's men flew 85 combat missions. These 85 missions consisted of 712 sorties, the most of any group in the XII ASC, and comprised fighter-bomber missions, escort missions, and fighter sweep and cover missions. The 33rd dropped a total of 500 tons of 500 pound bombs on Pantelleria, claiming three gun positions hit and six buildings destroyed. Perhaps most importantly, the 33rd experienced no losses of men or aircraft during the entire campaign.<sup>23</sup>

These numbers were readily available because statistical analysis played a major role in the aerial operation. Solly Zuckerman had recently become Tedder's scientific adviser at Mediterranean Air Command. If there were a standard profile for a war planner, Zuckerman was not it; he was a trained doctor who made his early academic work in the study of the sexual and social lives of apes and monkeys. This work became the precursor for more work on the effects of bomb blasts on monkeys once the war began. With the German

<sup>&</sup>lt;sup>20</sup> Charles W. Dryden, *A-Train: Memoirs of a Tuskegee Airman*, (University of Alabama Press, 1997), 126.

<sup>&</sup>lt;sup>21</sup> Frank Joseph, Mussolini's War: Fascist Italy's Military Struggles from Africa and Western Europe to the Mediterranean and Soviet Union 1935-45 (Helion and Company, West Midlands, England, 2010), 169.

<sup>&</sup>lt;sup>22</sup> Richard G. Davis, *Carl A. Spaatz and the Air War in Europe* (Center for Air Force History: Washington, D.C., 1993), 236; Momyer Oral History, 36.

<sup>&</sup>lt;sup>23</sup> Headquarters XII ASC, "Report of Operations, Pantelleria Campaign," p. 1-11, 651.306-2, 14 May - 12 Jun 1943, IRIS No. 00246450, AFHRA.

air raids on Britain, Zuckerman began analyzing the physical and moral impact of bombs of different sizes and fuses on houses, factories, and people.<sup>24</sup> Zuckerman's specialty was, therefore, the analysis between effort and effect. He determined the destruction of just one gun emplacement of Pantelleria would require four hundred 1,000 pound bombs dropped from heavy bombers. Because this scale of effort could not be accomplished for the over eighty gun emplacements on the island, Zuckerman believed the targeting should focus on destroying thirty percent of the total emplacements and then the "silencing of the remainder would follow from secondary causes." These secondary causes included the disruption of communications, the destruction of supplies, deaths of enemy personnel, and the demoralization of those on the island from the constant attacks of Allied air power. The constant barrage also kept enemy personnel from making repairs on the destroyed or damaged equipment.<sup>25</sup>

As a group commander, Momyer gained exposure to these targeting philosophies as the assignments for his squadrons came down from higher headquarters. This kind of statistical analysis formed the foundations for the interdiction campaigns that followed as the Allies made their way across Europe. Although Zuckerman later courted controversy for his advocacy of attacking railroad marshalling yards over railroad bridges in interdiction efforts, his analytical approach to the application of airpower brought a new level of deliberateness and analysis to the art of war waged from the air.<sup>26</sup>

The orchestration of a nearly non-stop aerial operation in an extremely constrained geographical area also influenced Momyer, who later observed Spaatz had had "continuous operational control of all the air elements."<sup>27</sup> With that authority, Spaatz "rigidly prescribed the daily bomber effort required of both the Strategic and Tactical Air Forces."<sup>28</sup> Momyer felt this centralized

<sup>&</sup>lt;sup>24</sup> Walt Whitman Rostow, *Concept and Controversy: Sixty Years of Taking Ideas to Market* (University of Texas Press, Austin, Texas, 2003), 35.

<sup>&</sup>lt;sup>25</sup> Army Air Forces Historical Study No. 52 (AAFRH-52), *The Reduction of Pantelleria and Adjacent Islands* (Army Air Forces Historical Office: Washington, D.C., 1947), 28-29.

<sup>&</sup>lt;sup>26</sup> See John F. Kreis, Ed. Piercing the Fog: Intelligence and Army Air Forces Operations in World War II (Air Force History and Museums Program, Washington, D.C., 1996), 186-187.

<sup>&</sup>lt;sup>27</sup> Airpower in Three Wars, 48.

<sup>&</sup>lt;sup>28</sup> Army Air Forces Historical Study No. 52 (AAFRH-52), *The Reduction of Pantelleria and Adjacent Islands* (Army Air Forces Historical Office: Washington, D.C., 1947), 25.

control of airpower was important, and the idea became a prominent component in his airpower thinking.

The Axis powers recognized the value of the capture of Pantelleria. "There's no longer any doubt in my mind that the island's being softened up for a landing," said the leader of the Sicily based Italian fighter group. "Now that Pantelleria has surrendered without a shot being fired, they don't need aircraft carriers any more. Malta and Pantelleria are ideal springboards for their fighters – you might even say they're unsinkable aircraft carriers."<sup>29</sup> On the other hand, at least one Allied senior leader thought the month spent attacking Pantelleria was a wasted effort. General Omar Bradley later recalled, "It was this damnably stupid 'island-hoping' mentality that gave our enemies the luxury of time and that needlessly cost so many American soldiers their lives in the Mediterranean."<sup>30</sup>

With the fall of Pantelleria, the 33rd, minus the 99th, packed up and moved to yet another base against which they had flown attack sorties, meeting upon their arrival Brigadier General Strickland, the new Allied military governor of the island and the same officer Momyer had known from his days at Hatbox Field. <sup>31</sup> The 33rd moved into the vast underground hangar on the island. Over 1500 feet long and 75 feet wide, its subterranean location made it completely bomb proof and an ideal shelter for 10,000 Italians just days before. As a result of the recent miserably overcrowded conditions and malnourished inhabitants, the hangar was in a "filthy, unsanitary condition, practically crawling with lice, fleas, rats and almost every type of vermin."<sup>32</sup> It took a lot of work to make it hospitable, but the 33rd once again overcame stark conditions with hard work and ingenuity.

As the men settled in to the routine of operations on Pantelleria, the engines of war continued to hum. Operation HUSKY, the upcoming invasion of Sicily, loomed on the horizon. The combined chiefs again designated

<sup>&</sup>lt;sup>29</sup> Johannes Steinhoff, *Messerschmitts over Sicily: Diary of a Luftwaffe Fighter Commander* (Stackpole Books, Mechanicsburg, Pennsylvania, 2005), 65.

<sup>&</sup>lt;sup>30</sup> As quoted in Frank Joseph, *Mussolini's War: Fascist Italy's Military Struggles from Africa and Western Europe to the Mediterranean and Soviet Union 1935-45* (Helion and Company, West Midlands, England, 2010), 169.

<sup>&</sup>lt;sup>31</sup> 60th Fighter Squadron History, 62-63; 58th Fighter Squadron History, 131; Craven and Cate, Army Air Forces in World War II, vol. 2, 430.

<sup>&</sup>lt;sup>32</sup> 59th Fighter Squadron History, 131; 60th Fighter Squadron History, 63.

Eisenhower as supreme allied commander and, once more, Eisenhower chose three component commanders for the operation. Alexander served as deputy commander in chief and led the land component, with Montgomery's British Eighth Army and Patton's Seventh U. S. Army as the main subordinate commands under his Fifteenth Army Group. Cunningham's Naval Forces Mediterranean formed the sea component, and Tedder's Mediterranean Air Command formed the air component. The overall plan put Patton's Seventh Army, convoyed by a Western Naval Task Force with amphibious landings between Scoglitti and Licata, on the southern coast of Sicily with the main eastern attack force of Montgomery's Eighth Army coming ashore on beaches just south of Syracuse. Operation HUSKY was the largest amphibious operation of the war to date. More importantly, it was the first landing against a fully-defended shore in the enemy's homeland.

Tedder's Mediterranean Air Command was primarily a policy and planning staff. The three air commands subordinate to the MAC were the Middle East Air Command, the Yalta Air Command, and Spaatz's Northwest African Air Forces (NAAF). By this time, Spaatz's NAAF was the largest of the three subordinate units and was to carry the lion's share of the air effort in the Sicily campaign. The Strategic Air Forces, with help from the Ninth Air Force, had been flying bombing missions against Axis forces in Sicily throughout the Tunisian campaign. However, these attacks became more focused on Sicily as the day for the Allied landings neared.

As land operations neared the European continent, the primary purpose of the NAAF was to act in cooperation with the land and naval components. There were no efforts aimed directly at the enemy's overall capacity to wage war. Although the word 'strategic' in World War II typically conjured images of waves of B-17s targeting the enemy's heartland, Spaatz used his Strategic Air Forces primarily in strikes against interdiction targets in the enemy's rear areas: railroads, bridges, supply centers, airfields, and the like. When the situation called for the air effort to shift its focus from these objectives, Spaatz could make it happen. This made it extremely beneficial to have the heavy bombers under his control.

The air plan for HUSKY outlined a phased plan of attack. The NAAF was to first attack enemy air forces, focusing on airfield attack. Next, they were to attack the roads and railways in an attempt to cut off supplies to the battlefield. Their last role would be direct support of ground forces. In support of the first phase, the 33rd escorted A-20 medium bombers on attacks of the Sciacca Airfield on southern Sicily. During the first week in July, while Allied troops prepared to depart from ports in Tunisia and Algeria, the 33rd continued to escort these bombing attacks on the Axis airdrome.<sup>33</sup>

On July 3rd, Momyer once again led his group to the skies on an escort mission for A-20s. A force of ten Me-109s interrupted the eighty mile trip to Sicily, and in the ensuing combat, Teniente Giovanni Dell'Innocenti, pilot of an Italian Me-109, was shot down.<sup>34</sup> With twelve aerial victories, Dell'Innocenti was one of Italy's top scoring aces.<sup>35</sup> Although they were still clearly capable, the enemy Momyer's P-40s met in the skies over Sicily was a much dilapidated version of the force they had met in the skies over Tunisia. The story of JG 77, the German 'Ace of Hearts' wing, was fairly typical. The wing left Tunisia in April 1943 as the Allies closed in on Tunis. In the escape, the pilots had to carry their mechanics in the fuselages of their Messerschmitts. The men flew to Sicily and set up a new operation with only the aircraft, the mechanics, and the pilots. All the tools and equipment they needed to sustain the operation had to be reacquired. These activities all took place under the almost daily bombardment from B-17s, B-24s, and Wellingtons. Of their original strength of 120 aircraft, the German organization was now down to 40.<sup>36</sup>

While the 33rd concentrated on Sciacca, the rest of Allied assets hit other airfields over the island. Nineteen airfields provided plenty of targets. The airfield attacks were very effective. One Luftwaffe wing commander remembered, "A bomb carpet is a terrible weapon . . . particularly effective were the smaller bombs which the enemy released by the thousand. They made only

<sup>33</sup> Davis, Spaatz, 240; Orange, Coningham, 163; 58th Fighter Squadron History, 132;
 <sup>59</sup>th Fighter Squadron History, 54.
 <sup>34</sup> 59th Fighter Squadron History, 53

<sup>&</sup>lt;sup>35</sup> Marco Mattieli and Richard Caruana, *53 Stormo* (Osprey Publishing, Long Island City, New York, 2010), 109.

<sup>&</sup>lt;sup>36</sup> Samuel W. Mitcham and Friedrich Von Stauffenberg, *The Battle of Sicily: How the Allies Lost Their Chance for Total Victory* (Stackpole Books, Mechanicsburg, Pennsylvania, 2007), 52-53.

shallow craters and the fragments, projected outwards at high velocity and close to the ground, shredded the outer skins of our aircraft as though they were made of paper."<sup>37</sup> Despite their situation, the Axis air forces still took to the skies and inflicted damage. When asked about the kind of odds the Axis faced over Sicily, one German general replied, "For heavens' sake, who in fighters today still bothers about relative strengths? When I tell you that the Allies have about five thousand aircraft against our three hundred and fifty you'll be able to calculate the enormous chances you have of shooting them down."<sup>38</sup>

As the day of the Sicilian invasion grew near, the tension on Pantelleria became palpable. Although most knew that big things were ahead, a visit from Air Marshall Coningham on July 7 solidified the fact. Momyer looked on as Coningham addressed his aviators. Coningham emphasized that the invasion of Sicily was 'the big one.' They were taking the fight to the enemy homeland. "In just over 48 hours," he told them, "you will be covering an invasion force of more than 2,000 Allied ships." The maximum efforts of the 33rd, Coningham relayed, would be critical to the success of the Allied operation.<sup>39</sup>

On the 8th and 9th, the 33rd occupied the time leading up to the invasion with escort missions of the shipping convoys making their way toward Sicily. After completing these escort missions and on the evening of July 9th, Momyer gathered his men together in the subterranean hangar on Pantelleria, where Momyer laid out the plans for the 33rd's participation in HUSKY. Flying operations for the next three days would be nearly continuous. It would take a complete team effort by the whole group to rise to the challenge. Pilots would fly more sorties in fewer days then they had in recent memory and the ground crews would be forced to use every bit of skill they had to keep the airplanes

-

<sup>&</sup>lt;sup>37</sup> Samuel W. Mitcham and Friedrich Von Stauffenberg, *The Battle of Sicily: How the Allies Lost Their Chance for Total Victory* (Stackpole Books, Mechanicsburg, Pennsylvania, 2007), 60.

<sup>&</sup>lt;sup>38</sup> Johannes Steinhoff, Messerschmitts over Sicily: Diary of a Luftwaffe Fighter Commander (Stackpole Books, Mechanicsburg, Pennsylvania, 2004), 67.

<sup>&</sup>lt;sup>39</sup> Account in Coulter diary as quoted in Gary W. Metz, *Last of the Randolph Blues*, unpublished, 244.

flying. As he spoke, Momyer looked into the eyes of his men and saw fire. They were ready.<sup>40</sup>

At 4 a.m. on the morning of July 10th, D-Day for Operation HUSKY, the engines of the 33rd's P-40s sprang to life for an intense day of operations in support of the landings by General Lucian Truscott's 3rd Division on the beaches near Licata, Sicily. The 33rd flew nine separate missions that first day. "In flights of 11 and 12 ships, and in composite missions," the 58th's war diary noted, "the Squadron pilots swerve and circle over the smoke-screened barges, watching for enemy attackers, as the Allied forces pile on the island."<sup>41</sup>

The 33rd primarily flew cover for the invasion forces. For this task, the pilots worked with a Fighter Control Center aboard the *USS Monrovia*, also the flagship of the Western Naval Task Force. Patton and Hewitt were both aboard. The fighter director's office was a small, poorly ventilated room nearby the flagship command center. The priorities for the fighter directors were to "first protect the shipping, second the beaches, and third, to provide Air Support for ground operations." Momyer and his men checked in with the fighter director upon reaching the assault area. As long as the radio worked, which was rare, the director would pass along assignments. During the invasion, ship borne radar detected eighty-nine enemy air raids across the entire span of the Western Naval Task Force. Airborne cover aircraft intercepted and drove away twenty-six of those attempted enemy aerial interdiction efforts before they were a factor to the landings. Patrolling aircraft engaged the remaining sixty-three over the landing areas. 43

The after-action raid totals did not include Axis 'surprise attacks.' On these sorties, Axis pilots came in at very low altitudes to evade detection by Allied radar. "A great deal of trouble was experienced," the after-action report read, "from planes strafing and bombing the beaches and beached landing

<sup>&</sup>lt;sup>40</sup> Davis, Spaatz, 240; Orange, Coningham, 163; 58th Fighter Squadron History, 132; 59th Fighter Squadron History, 54.

<sup>&</sup>lt;sup>41</sup> 58th Fighter Squadron History, 134.

<sup>&</sup>lt;sup>42</sup> Action Report – Western Naval Task Force, The Sicilian Campaign, Operation "HUSKY" July-August, 1943, 92.

<sup>&</sup>lt;sup>43</sup> Action Report – Western Naval Task Force, The Sicilian Campaign, Operation "HUSKY" July-August, 1943, 91.

craft. These came in very low, down valleys and then darted over the ridge of hills onto the beaches."44

In six days, Momyer's men flew 38 missions in support of both the amphibious landings and continuing operations. The reviews for overall air support were mixed. Admiral Cunningham noted the "navies and armies owed a great debt to the air forces for the effectiveness of the protection offered them through the operation," while General Bradley of II Corps asserted "the air support provided us on Sicily was scandalously casual, careless and ineffective."

Some of Bradley's frustration with air support for the operations was, as was often the case, a personality issue. Coningham took the attitude, "Tell us what you want done and we'll deliver – in our own way." This kind of 'trust us' assurance was not always enough for the ground commanders. "Even when pressed, they would tell us nothing about how they would support our landings," Bradley later wrote. Undoubtedly, this added to concerns over air support.<sup>46</sup>

Momyer later reflected on the command arrangements for the operation. "The Tactical Air Force commander," he wrote, "controlled all Airpower used to isolate the objective, provide air defense for the area, and support the troops during their landing and their movement inland." In addition, "he was responsible for targeting and controlling naval aviation." Notably, US aircraft carriers were not present for HUSKY. Only the British Eastern Naval Task Force possessed two British flattops. "While it is believed that the Tactical Air Force made a strong effort to provide continual daylight cover over the assault areas and the beaches," Hewitt wrote in his after-action report, "the amount of

<sup>&</sup>lt;sup>44</sup> Action Report – Western Naval Task Force, The Sicilian Campaign, Operation "HUSKY" July-August, 1943, 91

<sup>&</sup>lt;sup>45</sup> Samuel Eliot Morison, *History of United States Naval Operations in World War II, Sicily - Salerno - Anzio*, (University of Illinois Press: Champaign, Illinois, 2002), 71; Army Air Forces Historical Study No. 37 (AAFRH-37), *Participation of the Ninth and Twelfth Air Forces in the Sicily Campaign* (Army Air Forces Historical Office: Washington, D.C., 1945), 103; Alan F. Wilt, "Allied Corporation in Sicily and Italy, 1943-1945," in *Case Studies in the Development of Close Air Support* edited by Benjamin Franklin Cooling (Office of Air Force History: Washington, D.C., 1990), 170; Cunningham as quoted in Orange, *Tedder*, 226 and Bradley as quoted in Orange, *Coningham*, 163.

<sup>&</sup>lt;sup>46</sup> Vincent Orange, *Coningham: A Biography of Air Marshal Sir Arthur Coningham* (Center for Air Force History, Washington, D.C., 1992), 163.

<sup>&</sup>lt;sup>47</sup> Airpower in Three Wars, 49.

protection was insufficient and not commensurate with the naval effort and the value of ships, men and material involved."<sup>48</sup>

The combined efforts of the Strategic Air Force, Tactical Air Force, and Coastal Air Force of the NAAF, as well as elements of the Ninth Air Force, virtually erased Axis resistance in the air over Sicily by July 14th. As the Allied armies moved into Sicily, engineers quickly prepared captured airfields for Allied aircraft. On July 17th, Momyer's P-40s left Pantelleria for a trip to Sicily's Licata airfield. Overjoyed to be off of 'Mussolini's Gibraltar,' the 33rd promptly began flying missions in support of the north and westward advance of the Seventh Army toward Palermo, conducting a variety of missions ranging from close air support to bomber escort to armed reconnaissance. Now ashore, Headquarters XII ASC again picked up responsibility for the 33rd. The Army routed air support requests from the division or corps level to XII ASC.<sup>49</sup>

As Momyer established his operation at Licata, the men and the aircraft of the 99th Fighter Squadron rejoined the group. During their first week at Licata, the 33rd found the skies over Sicily virtually empty of enemy air activity. German troops received no support from their own fighter-bombers and the Allied bombers flew missions free of harassment from enemy air. Only one Axis field still operated on all of Sicily.<sup>50</sup> With this localized version of almost total air superiority, the 33rd flew missions against ground targets. Bridges, trucks, and Axis troop concentrations all felt the wrath of the 33rd.<sup>51</sup>

Despite their successes in the air, the stress of combat operations continued to affect the men. In mid-July, the group surgeon reported some of the group's older pilots were showing signs of fatigue. These signs included, "increased irritability, tremors, insomnia requiring hypnotics, withdrawal mechanisms, ideas of reference, mild depressions, increase appearance at sick call for minor complaints, and outward signs of fatigue and weight loss." Very shortly, a large contingent of aviators left the group for rest and rehabilitation. Through these rotations back to the states, the 33rd experienced nearly two

67

<sup>&</sup>lt;sup>48</sup> Action Report – Western Naval Task Force, The Sicilian Campaign, Operation "HUSKY" July-August, 1943, 91.

<sup>&</sup>lt;sup>49</sup> AAFRH-37, Ninth and Twelfth Air Forces in the Sicily Campaign, 113, 131; 58th Fighter Squadron History, 138.

<sup>&</sup>lt;sup>50</sup> 9th and 12th in Sicily, 131.

<sup>&</sup>lt;sup>51</sup> 60th History, 71-73.

complete turnovers of personnel since coming overseas. This, of course, did not include Momyer or his key and command pilots, but the changeover did sharpen the leadership challenges Momyer faced.<sup>52</sup>

As Montgomery slugged his way north to Messina, Patton split his forces to first take Palermo in the west and then split the island in two parts with a push north for the coast. Meanwhile, the 33rd concentrated their efforts on fighter-bomber missions, often bombing objectives ahead of ground troop advances. As Patton began his push west, the 33rd flew a number of attack missions to interdict the two northern roads running to Messina.<sup>53</sup>

Along the central road and the path of the American 1st Infantry Division lay the mountain town of Troina. Some of the most intense combat of the entire Sicily campaign took place there in early August. It was fertile ground for new levels of air to ground cooperation. Sensing a need for more cooperation, the 1st Infantry Division sent a liaison officer to Licata with a radio. In turn, Momyer sent a lieutenant from the 60th to act as a liaison and radio relay for ground requests for air support. The lieutenant targeted the airplanes of the 33rd after arrival from their sixty mile trip to the battle lines. Major General Terry de la Mesa Allen, commander of the 1st Infantry Division noted, "in the attack on Troina a closely coordinated air, artillery and infantry attack went off with clock-like precision." From a ground commander, this was high praise. Later in the campaign, Bradley's II Corps placed mobile fighter control parties in jeeps with radios. These innovations provided the foundations for air operations in support of ground forces in later campaigns. 54

In eastern Sicily, after the Germans held out for three weeks, the British Eighth Army took Catania on August 5th. After the victory at Troina, Patton's Seventh Army moved eastward along the island's central and northern highways. The enemy was soon in a controlled withdrawal across the island. As the Germans began their evacuation, Momyer's men and the rest of the NATAF focused their efforts on the German evacuation routes and equipment near the straits of Messina. As the official history read, "in spite of all the

 $<sup>^{52}</sup>$ 33rd Fighter Group Medical History, Call# GP-33-HI (FI), Jan 41 - Dec 44, IRIS# 0079380, p. 34-35.

<sup>53</sup> CMH 72-16, Sicily, 21.

<sup>&</sup>lt;sup>54</sup> Maj Gen Terry de la Mesa Allen as quoted in AAFRH-37, *Ninth and Twelfth Air Forces in the Sicily Campaign*, 183-84; *60th Fighter Squadron History*, 75.

efforts of the Northwest African Air Force, however, the Germans conducted their withdrawal from Sicily with at least partial success." The failure to stop the evacuation was the disappointment of the campaign. On August 17th, Patton stood in Messina as Montgomery arrived. The race was over and Sicily belonged to the Allies.<sup>55</sup>

This trial by fire, in both North Africa and Sicily, helped birth the first modern statement of air doctrine. Field Manual 100-20, Command and Employment of Air Power, was published in Washington, D.C. at the end of July. Much of the lessons learned in Tunisia now appeared in print. The first three paragraphs outlined the doctrine of command and employment and were written in all capital letters for emphasis. First, "LAND POWER AND AIR POWER ARE CO-EQUAL AND INTERDEPENDENT FORCES: NEITHER IS AN AUXILIARY OF THE OTHER." The next paragraph captured the Coningham dictum, "AIR SUPERIORITY IS THE REQUIREMENT FOR THE SUCCESS OF ANY MAJOR LAND OPERATION." Further, "THE INHERENT FLEXIBILITY OF AIR POWER," read the third element of the doctrine, "IS ITS GREATEST ASSET. THIS FLEXIBILITY MAKES IT POSSIBLE TO EMPLOY THE WHOLE WEIGHT OF THE AVAILABLE AIR POWER AGAINST SELECTED AREAS IN TURN; SUCH CONCENTRATED USE OF THE AIR STRIKING FORCE IS A BATTLE WINNING FACTOR OF THE FIRST IMPORTANCE.IF THIS INHERENT FLEXIBILITY AND ABILITY TO DELIVER A DECISIVE BLOW ARE TO BE FULLY EXPLOITED."56 With FM 100-20, the thoughts of Airmen were now official Army doctrine.

With the Sicily campaign closed, the 33rd spent the remainder of August at Licata in relative inactivity. As August turned to September, the 33rd moved to an airstrip at Termini, on the north coast of Sicily, in preparation for the next phase of Mediterranean campaign. Just before the move, Lieutenant Colonel Davis left the 99th to return to America and take command of the 332nd Fighter Group. Major George Roberts assumed command of the squadron for the move to Termini.

<sup>&</sup>lt;sup>55</sup> Headquarters XII ASC, "Report of Operations, Sicilian Campaign," p. 5, 651.306-3, IRIS No. 00246451, AFHRA; 60th Fighter Squadron History, 74-76; AAFRH-37, Ninth and Twelfth Air Forces in the Sicily Campaign, 143-145; 59th Fighter Squadron History, 60

<sup>&</sup>lt;sup>56</sup> War Department Field Manual FM 100-20, "Command and Employment of Air Power," 21 July 1943.

Although it was not officially decided until the last Axis forces left Sicily, the planning for the invasion of mainland Italy had been ongoing for months. In the months following the Casablanca Conference, the Allies debated the strategic opportunities that would follow the conquest of North Africa. Finally, after realizing that much of the decision depended upon an assessment of the Italians after the invasion of Sicily, the combined commanders in chief passed the responsibility of deciding the time and place of the Italian invasion to Eisenhower. Eisenhower decided upon a two pronged invasion of the mainland of Italy; one at the "toe" of Italy across the straits from Messina, and one further north on the west coast near Salerno. Montgomery's Eighth Army was to undertake the invasion at the toe, named Operation BAYTOWN. General Mark Clark's Fifth U. S. Army planned to storm the beaches at Salerno in Operation AVALANCHE. Much as with the invasion of Sicily, Allied air attacks against southern Italy had been ongoing for many weeks prior to the landings. These attacks sought to interdict the flow of supplies to Axis armies first in North Africa and later in Sicily. Thus, the campaign for air superiority and the isolation of the battlefield was under way well before the first Allied troops hit the beaches.57

The 33rd's job before the invasion was to operate from an airfield south of Palermo until Clark's forces established a beachhead for AVALANCHE. The support personnel of the 33rd and 99th accompanied the men of General Clark's Fifth Army in the assault on the beaches of Salerno beginning on September 9th. By September 13th, and after days of heavy fighting, Allied engineers finished construction on a landing strip at Paestum, just south of Salerno. The 33rd's P-40s and more support personnel in C-47s began landing at Paestum on the 13th, just as an Axis counterattack on the Allied beachhead was reaching its height. "Not only is artillery fire rumbling from front-lines, only six or seven miles from the field," the 58th historian wrote of the arrival, "but the 58th flies into the center of three different passes overhead of German aircraft, cutting-in on the mass of shipping [in the Bay of Palermo] with guns firing." With the VI Corps under heavy attack in a focused German

<sup>&</sup>lt;sup>57</sup> Army Air Forces Historical Study No. 15 (AAFRH-15), *Air Phase of the Italian Campaign to 1 January 1944* (Army Air Forces Historical Office: Washington, D.C., 1946), 10.

counteroffensive, the 33rd immediately joined the battle. Eight P-40s took off to bomb and strafe a road intersection in a town less than 15 miles from the field. In what was by far their hottest operating field since Thelepte, the 33rd was not only fighting for the overall Allied effort, but also helping protect their new home from being overrun by German forces. That night, the soldiers of VI Corps pulled back into defensive positions to better withstand the German counteroffensive. This action significantly decreased the size of the beachhead, but was necessary for survival.<sup>58</sup>

Momyer settled in to his first night on the beaches of Italy. He set up his headquarters in a lone, pink-tinted Italian villa near the field. The building seemed a stark contrast to the surrounding chaos. Throughout the night, Navy boats just offshore maintained a rigorous shelling of the German positions surrounding the beach. The Luftwaffe, once again battling the odds, sent bombers over the Allied convoys in the hope of putting an attacking ship at the bottom of Salerno Bay. The airborne British Beaufighters lay low until just the right moment - sending one of the German aircraft down in yellow-red flame. Momyer's men watched the wreckage fall to the earth just a few hundred yards from their field.<sup>59</sup>

The situation on the beach the next morning matched the night's chaos. "HELMETS ARE THE FASHION AGAIN," wrote the 59th historian, the only all capital letter entry in the squadron's official Salerno account. Four Luftwaffe air raids tore across the field at Paestum. Although the Luftwaffe targeted the Allied ships, they did not hesitate to strafe Momyer's field as they flew by. 60 Recognizing that units of VI Corps were in a precarious position, Spaatz focused his air forces to support the Salerno efforts. On the first mission of the long day, twelve of the 33rd's P-40s took off to bomb German concentrations of troops and supplies that were even closer than the night before. In addition to the sorties flown by the 33rd on the 14th, Coningham's Tactical Air Force flew over 1,000 sorties dropping 159 tons of bombs on targets of opportunity.

 <sup>&</sup>lt;sup>58</sup> 58th Fighter Squadron History, 151; 59th Fighter Squadron History, 63-64; AAFRH-15,
 Air Phase of the Italian Campaign; 124; Center of Military History Publication 100-7
 (CMH 100-7), Salerno: American Operations from the Beach to the Volturno (United States Army Center of Military History: Washington, D.C., 1990), 63-66.
 <sup>59</sup> 58th History, 152.

<sup>&</sup>lt;sup>60</sup> 59th History, 64.

Doolittle's Strategic Air Force aided the effort with 99 B-17s, 154 B-25s, 98 B-26s, and 36 RAF Baltimores dropping over 497 tons of bombs on the same area that the 33rd aircraft attacked in the morning. The lines between strategic air forces and tactical air forces blurred with some of the heavy bombers' weapons exploding within view of Allied ground forces. The attacks continued into the night of the 14th with British Wellington's dropping over 240 tons of bombs on the massed forces of the German counterattack.<sup>61</sup>

Momyer awoke on the morning of the 15th to three German 90 mm artillery shells landing at the west end of the airstrip. No one was injured, but the event highlighted the precarious position of the Allied forces. By this time, Momyer's men could nearly set their watches to the timing of the Axis attacks on Allied shipping. With this knowledge, the 59th took to the air and flew low near the mountains waiting for the next flight of Luftwaffe aircraft to arrive. They showed up right on time, and the 59th claimed six FW-190s.<sup>62</sup> The incident once again made fodder for the papers back at home. "Momyer Uses Beach Field, Fools Nazis," read the headline. "American Warhawk fighters, operating from a hastily made field on the Salerno beachhead, surprised and blasted German planes which came in to strafe Allied forces, confident the landing troops had no air protection . . . the Warhawks pounced on them, diving in their own flak to do so."<sup>63</sup>

After another day of intensive operations, the Allies finally felt secure on their Salerno beachhead. In addition to the hard fighting of the men of Clark's Fifth Army and the support of over 3,500 tons of bombs from Allied aircraft during the period of September 12th-15th, fire from Navy ships in the bay hit the German forces with 11,000 tons of artillery shells over the course of the Salerno operation. The Allies literally pulled victory from the jaws of defeat. Two weeks after the crisis ended, Eisenhower wrote, "13 September was the darkest one, for us, of our present venture, and there were some serious-looking faces around here [the Headquarters of Allied command at Tunis]."<sup>64</sup> As

<sup>&</sup>lt;sup>61</sup> 60th Fighter Squadron History, 85; AAFRH-115, Air Phase of the Italian Campaign, 141-142.

<sup>62 59</sup>th Fighter Squadron History, 64.

<sup>63 &</sup>quot;Momyer Uses Beach Field, Fools Nazis," Seattle Times, September 27, 1943.

<sup>&</sup>lt;sup>64</sup> 59th Fighter Squadron History, 65; Davis, Spaatz, 256; Eisenhower as quoted in Orange, Tedder, 237.

Tedder's biographer later put it, "as an example of co-operation and coordination, flexibility, concentration . . . as an example of almost every possible product of advanced theatre air thinking in time of disaster, 13th, 14th, and 15th September should be allowed pride of first place."65 The air support during this period, said Spaatz, "demonstrated to a greater extent than ever before the importance of Air Force flexibility in organization and operations and the decisive effect which air power has in combined operations."66

While the 33rd fought from the beach at Salerno, the 99th remained on Sicily. There was just not enough room on the field for another squadron of P-40s. Shortly after Salerno was secure, Momyer forwarded a now infamous report criticizing the performance of the 99th during the ninety days they were attached to his command. The report was anonymously quoted in a later letter and began with a compliment, "the ground discipline and ability to accomplish and execute orders promptly are excellent."67 Then the criticism commenced. Momyer first criticized the 99th's inability to maintain formation integrity when the enemy appeared. This was a reference to the 99th's first encounter with enemy fighters in the air. By their own admission, the men in formation that day all chased after the enemy fighters. In their inexperience, each wanted to be the first to shoot down an Axis aircraft and momentarily forgot about the lessons Cochran had taught them in Tunisia. Later, in testimony refuting Momyer's charges, Davis stated, "that the squadron disintegrates when jumped was brought to my attention only one time . . . the reason for that failure was inexperience."68

Momyer also generalized the fighting capabilities of the 99th. "It is my opinion," he wrote, "that they are not of the fighting caliber of any squadron in the group." Further, "they have failed to display the aggressiveness and desire for combat that are necessary to a first class fighting organization."69 To justify

<sup>65</sup> Roderic Owen, Tedder (Collins, London, 1952), 228. 66 AAFRH-15, 146.

<sup>&</sup>lt;sup>67</sup> Ulysses Lee, United States Army in World War II, Special Studies, The Employment of Negro Troops (Center of Military History, United States Army, Washington, D.C., 1966), 453.

<sup>68</sup> As quoted in J. Todd Moye, Freedom Flyers: The Tuskegee Airmen of World War II,

<sup>&</sup>lt;sup>69</sup> As quoted in J. Todd Moye, Freedom Flyers: The Tuskegee Airmen of World War II, 101.

this claim, Momyer blamed the 99th for having turned back on a mission when they deemed the weather to be marginal when other 33rd aviators successfully pressed the attack despite the weather. Colonel Davis attested that he led the mission and did not believe the weather conditions were safe and the mission that day provided no alternate target.

Momyer's assessment was practical, but not fair. A great number of the men of his 33rd group were seasoned veterans of the Tunisian campaign. When new pilots joined the 33rd, they flew with experienced pilots. Since the 99th operated as an attached but separate entity of the 33rd, they did not get this same benefit. Momyer's report compared a squadron consisting entirely of combat inexperienced pilots to squadrons with a number of aviators who had been in combat operations since December of 1942. The 99th was well-trained by Cochran, but combat operations provided an entirely new and advanced level of employment.

Although Momyer never specifically mentioned the 99th's record of aerial victories, many assumed that his comment about aggressiveness referenced the 99th's single aerial victory in just over three months of combat. When Momyer received control of the 99th at the end of May, the air threat around Pantelleria was relatively minimal. By the time the 99th was reassigned at the end of June, they had scored their one aerial victory. During that same time period, one of Momyer's squadrons had two aerial victories. The other two squadrons had none.

The 99th scored no aerial victories the next time they were attached to the 33rd. From July 19th until September 17th, they operated from the same locations as the rest of the group. During that period, only the 59th scored victories – six to be exact. Four of those six occurred on one day when the enemy was particularly active.<sup>72</sup> Although the 33rd did score seven more

<sup>&</sup>lt;sup>70</sup> Ulysses Lee, *United States Army in World War II, Special Studies, The Employment of Negro Troops* (Center of Military History, United States Army, Washington, D.C., 1966), 453

<sup>&</sup>lt;sup>71</sup> Ulysses Lee, *United States Army in World War II, Special Studies, The Employment of Negro Troops* (Center of Military History, United States Army, Washington, D.C., 1966), 459.

<sup>&</sup>lt;sup>72</sup> 59th History, 58.

victories over the beach of Salerno, the 99th was not in place until later in the campaign.

Momyer also focused on Davis' request for a three day break for his squadron during the battle of Sicily. In highlighting this request, Momyer disparaged the 99th's stamina for combat operations. Davis cited pilot's fatigue as the reason for the request. Momyer compared the 99th's average of 28 total combat sorties per man to the 70 sortie average for pilots in the 33rd. He implied that his own pilots had not taken a break in nine months of combat.<sup>73</sup>

Momyer's pride in his own men impaired his ability to impartially assess the performance of the 99th. Momyer's men actually had a number of small breaks. The first of these breaks came approximately sixty days after his men began combat operations at Thelepte. Again, in later testimony, Davis acknowledged he had asked for a rest. He had received few replacement pilots and therefore did not have an opportunity to rotate his pilots through rest areas as the larger squadrons of the 33rd did.

At the heart of this issue, and a factor neither Davis nor Momyer explicitly addressed, was the relativity of stress and the coincident command reaction to it. After experiencing Thelepte, Momyer found it remarkable that Davis asked for a break from what were relatively much less stressful operations over Pantelleria and Sicily. Davis, on the other hand, without the benefit of the Thelepte experience to pull from, knew only what he had seen and he thought his men needed a break. Every commander must play the balance between care for his men and the accomplishment of the mission. Davis sought to find this balance as a new commander in combat. Clearly, Momyer was mission focused. In earlier months, survival depended upon it. In later testimony, Davis admitted he overshot the mark when he asked for the break. This was merely the case of a combat commander finding his stride.

Racial attitudes surely played a part in Momyer's assessment of the 99th's performance. Long ago, Momyer's father enforced the law in a town where racial tension was the norm. It would be specious to argue that Momyer did not pick up on that tension as he grew up in Muskogee in the Momyer

-

<sup>&</sup>lt;sup>73</sup> Maj Gen House to Maj Gen Cannon, 16 September 1943, Subject: Combat Efficiency of the 99th Fighter Squadron, from AFHRA, Maxwell AFB AL, electronic copy in possession of author.

household. Many of the original Tuskegee Airmen felt that Momyer did have it out for them from the beginning. At least one of the Tuskegee Airmen remembered, "Colonel Momyer was just plain prejudiced towards us."74

In most historical accounts, Momyer is portrayed as a villain in the Tuskegee Airmen story. However, it is hard to ignore the racist command climate in which he operated. General Edwin J. House, Momyer's supervisor as the commander of XII ASC, quoted Momyer's report, seemingly in full, and provided his comments for the chain of command. "The consensus of opinion seems to be," wrote House, "that the negro type has not the proper reflexes to make a first-class fighter pilot."75 This comment alone met the definition for racism, "a belief that race is the primary determinant of human traits and capacities and that racial differences produce an inherent superiority of a particular race."76

Although often attributed to Momyer, it was actually House who recommended the 99th should lose their P-40s and be assigned to coastal patrol duty in P-39s. "I believe it would be much better to assign the 99th to the Northwest African Coastal Air Force," he wrote, "equip it with P-39's and make the present P-40s available to this Command as replacements for the active operations still to come in this theater." House also requested Davis' newly formed 332nd Fighter Group stay at home for defense command so a white group could be sent to Europe in their stead. "It is recommended that if and when a colored group is formed in the United States," the report read, "it be retained for either the eastern or western defense zone and a white fighter group be released for movement overseas."77

On September 18th, Major General Cannon, the next senior American commander in the chain of command as the Deputy Commander of the

<sup>&</sup>lt;sup>74</sup> Spann Watson as quoted in Lynn M. Homan and Thomas Reilly, Black Knights: The Story of the Tuskegee Airmen (Pelican Publishing, Gretna, Louisiana, 2001), 104.

<sup>&</sup>lt;sup>75</sup> House as quoted in Bernard C. Nalty, Strength for the Fight: A History of Black Americans in the Military (Free Press, New York, 1986), 151.

<sup>&</sup>lt;sup>76</sup> Merriam Webster definition, "racism"

<sup>&</sup>lt;sup>77</sup> Maj Gen House to Maj Gen Cannon, 16 September 1943, Subject: Combat Efficiency of the 99th Fighter Squadron, from AFHRA, Maxwell AFB AL, electronic copy in possession of author.

Northwest African Tactical Air Force, added his endorsement to the report.<sup>78</sup> "The pilots of the 99th Fighter Squadron fall well below the standard of pilots of other fighter squadrons of this command in the following categories," he wrote.<sup>79</sup> He listed five factors. Cannon believed the 99th was not eager to engage in combat, lacked aggressiveness, did not possess and seemed "unable to acquire the will to win or to reach the objective," did not have the stamina of the pilots from other squadrons, and was not able to fight as a team under pressure.<sup>80</sup> Cannon's concluding sentence read, "The pilots of the 99th Fighter Squadron have no outstanding characteristics in which they excel in war the pilots of other squadrons of this Command."<sup>81</sup>

Lieutenant General Spaatz was the last to make his mark before the report reached General Arnold's staff. Spaatz once again commented that the ground discipline and conduct of the 99th was beyond reproach. He believed the squadron received excellent training, implying that they should be performing at a level equal to other squadrons in theater. "I am forwarding this report," he wrote, "with full confidence in the fairness of the analysis made by both General Cannon and General House."82

The analysis was anything but fair. Weeks later, the War Department's Advisory Committee on Negro Troop Policies heard the results of the report. Lieutenant Colonel Davis testified in front of the committee, defending the record of his former squadron. In his typical gentlemanly manner, Davis started his testimony stating Momyer was one of the best fighter pilots known to him and that anything he reported deserved respect. The rest of Davis' testimony was masterful, responding charge by charge with the special

<sup>78</sup> Daniel L. Haulman, "Tuskegee Airmen Chronology," Organizational History Branch, AFHRA, Aug 18, 2011, p. 14.

 $<sup>^{79}</sup>$  Maj Gen Cannon to Commanding General, Northwest African Air Force, 18 September 1943, from AFHRA, Maxwell AFB AL, electronic copy in possession of author.

 $<sup>^{80}</sup>$  Maj Gen Cannon to Commanding General, Northwest African Air Force, 18 September 1943, from AFHRA, Maxwell AFB AL, electronic copy in possession of author.

<sup>&</sup>lt;sup>81</sup> Maj Gen Cannon to Commanding General, Northwest African Air Force, 18 September 1943, from AFHRA, Maxwell AFB AL, electronic copy in possession of author.

<sup>&</sup>lt;sup>82</sup> Ulysses Lee, *United States Army in World War II, Special Studies, The Employment of Negro Troops* (Center of Military History, United States Army, Washington, D.C., 1966), 455.

circumstances that met the 99th.<sup>83</sup> Certainly there were other factors at play as well, but that testimony kept the men of the 99th in the war. Months later, the men were also vindicated by an official Army Operations study which compared the 99th to all other P-40 squadrons in the Mediterranean theater. The Army conducted the study in February 1944, after the 99th saw more combat action. During this period, they were attached to the 79th Fighter Group, and scored an impressive twelve aerial victories while the other three squadrons assigned to the 79th downed only three enemy aircraft. "An examination of the record of the 99th Fighter Squadron reveals no significant general difference between this squadron and the balance of the P-40 squadrons in the MTO."<sup>84</sup> Davis soon went on to further solidify his place in history as a defender of his nation.

In the week after the turning the tide at Salerno and as the battles over the 99th raged at home, the 33rd spent most of its time patrolling the beaches around Paestum, knocking out German fighter bombers sent to attack Allied ships in the harbor. Through October 3rd, the Italian weather kept the group's missions to a minimum. By this time, the Fifth and Eighth Armies drove the Germans north to an east-west line connecting Naples and Foggia. With better weather, the 33rd turned to a familiar business, isolating the battlefield with attacks on German transportation and supply routes beyond the battle line.

These missions continued until Momyer's days with the 33rd came to an end.85

On October 17th, after nearly a full year of command in the Mediterranean theater, Colonel William Momyer left the 33rd and departed for the United States. That same day, the 99th moved to Foggia, Italy for its new assignment with the 79th Fighter Group.<sup>86</sup> With more than two hundred combat hours and eight confirmed aerial victories, Momyer experienced more in a year than many would experience in a lifetime of aviation service.

<sup>83</sup> Ulysses Lee, *United States Army in World War II, Special Studies, The Employment of Negro Troops* (Center of Military History, United States Army, Washington, D.C., 1966), 459-460.

<sup>&</sup>lt;sup>84</sup> Report of the Statistical Control Division, Office of Management Control, 30 March 1944, "Operations of the 99th Fighter Squadron Compared with Other P-40 Squadrons in MTO, 3 July 1943 – 31 January 1944," Call #134.65-496, IRIS #00112858, USAF Collection, AFHRA, Maxwell AFB AL.

<sup>85 58</sup>th Fighter Squadron History, 154-165.

<sup>&</sup>lt;sup>86</sup> Daniel L. Haulman, "Tuskegee Airmen Chronology," Organizational History Branch, AFHRA, Aug 18, 2011, p. 16.

Momyer's record as a commander was commendable. The 33rd was one of the most respected groups in the Mediterranean Theater of Operations. Through his time in command, the men of the group flew over 9,000 combat sorties. They downed 3.4 Axis aircraft for every P-40 they lost to an enemy aircraft. Their total claim of enemy aircraft destroyed was 123. In mission after mission, they paved the way for success of Allied forces on the ground with attacks on enemy forces, equipment, and supplies. Although these were notable accomplishments, war was far from glamorous. Over his time in command, Momyer lost forty-four aviators in combat. Seventeen of those Airmen were lost in aerial combat.<sup>87</sup>

Momyer's leadership of the 33rd in the campaigns of Tunisia, Sicily, and Naples-Foggia turned the group from a green bunch of pilots just emerging from pilot training to one of the most respected fighter groups in the Army Air Forces. 'Moe's Mob,' as the newspapers tagged the 33rd, played a major role in the campaigns that formed the story of the development of tactical aviation in the armed services of the United States of America. Although Tunisia provided the hardest lessons, the trek from North Africa to Italy reinforced those lessons. In the minds of Airmen, the victory over Pantelleria without a soldier or a Marine on the ground proved the efficacy of airpower and its co-equality with land and sea forces. The landings and subsequent march across Sicily provided more evidence of the synergistic effects of a combined arms force, but also evidenced the natural tension between those that thought about airpower from the perspective of the men who fought in the air and those that thought about it from the perspective of the men who fought on the ground. Momyer's culminating combat experience in World War II was the fight for the beachhead at Salerno and the power of the flexibility advantaged by the centralized control of airpower and the ability to mass its effects where the situation required. Momyer left the battlefield with the breadth and depth of airpower lessons that only an experienced warrior leader could truly carry. His war experiences would form the foundation of all that followed.

 $<sup>^{87}</sup>$ 33rd Fighter Group History, Vol<br/> 1. October 1943 statistics, GP-33-HI, Nov 43 – Mar 45 V. 1<br/> 10 Nov 42 – 29 Feb 1944

## Chapter 5

## In Pursuit of Doctrine

After a long separation, the Momyer family was now back together. The three moved into a modest house on North Mills Avenue in north central Orlando.<sup>1</sup> Almost unbelievably, Jean was already seven years old. The base was only two and a half miles to the southwest. It was a wonderful place for the family to reunite. On December 17, 1943, Momyer reported to work for his first day of duty on the AAF Board.

Momyer returned to the states as a veteran combat airpower leader. While he undoubtedly desired another flying job, his time at the AAF Board exposed him to the continuing debates about the application of airpower. Through his time in Orlando, Momyer had the opportunity to learn about other aspects of an air campaign and to closely study the successes and failures of the application of force from the air. The next few years gave Momyer an opportunity to think about airpower in a way most of his generation would not. Momyer's subsequent assignment to the Tactical Air Command staff continued his participation in the doctrinal deliberations following the conclusion of World War II, and marked the early development of Momyer's skills as an airpower spokesman. Both assignments contributed greatly to the intellectual development of a future airpower commander.

While Momyer was fighting the war abroad, developments were ongoing in the tactics and doctrine development for the Army Air Forces. In June 1940, the Air Corps Tactical School (ACTS) at Maxwell Field in Alabama disbanded. A majority of Air Corps officers active at the time had already completed the course, and the service needed the field for other training. ACTS and the Air Corps Board, a subordinate organization, had served as the center of tactical and doctrinal thinking in the fledgling army air service since 1926. By 1942, the dissolution of ACTS and the Air Corps Board left the Army Air Forces without a center for airpower thought. On October 27, 1942, as Momyer prepared to board the *Chenango* on the way to North Africa, the Army Air Forces School of Applied Tactics (AAFSAT) opened in Orlando, Florida. The new school, a direct descendant of ACTS, would use combat veterans to train

80

<sup>&</sup>lt;sup>1</sup> Polk's Orlando (Orange County, Fla) City Directory, 1945, p.413.

officers in the realities of war. Following the relationship between the Air Corps Tactical School and the Air Corps Board, the Army Air Forces established the Army Air Forces Board (AAF Board) as a subordinate to AAFSAT in November 1942.<sup>2</sup>

The AAF Board, according to Major General Muir S. Fairchild, the Air Staff director of military requirements, was to, "study the over-all picture of Air Force matters with a view to making recommendations" to Air Force leaders on "such matters as Air Force strategy, technique, organization, equipment, training, etc."<sup>3</sup> As the organization evolved, a December 1943 Air Staff memorandum defined the AAF Board as "the agency by which the Commanding General, Army Air Forces develops tactics, techniques and doctrines and determines military requirements for the Army Air Forces."4 In support of this function, and by virtue of the responsibilities of his office, the assistant chief of Air Staff, operations, commitments, and requirements served as the president of the AAF Board and directed its actions from Washington, D.C. Other ex-officio members of the board were the commanding general of the Army Air Force Tactical Center (the new name for AAFSAT) and the commanding general of the Army Air Force Proving Ground Command. In Orlando, the responsibility for the board's organization and efficiency fell to the executive director, a brigadier general. Under the executive director were an executive, who supervised and coordinated division work, and a recorder, who supervised the administrative procedures of the board. The divisions of the board in late 1943 when Momyer arrived were Aircraft, Armament, Communications, Equipment, Organization, and Tactics.5

A world away from his combat duty in the Mediterranean, Momyer's time on the board, kept him well connected to airpower thought and practice.

<sup>&</sup>lt;sup>2</sup> Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force*, vol. 1 (Maxwell Air Force Base, Alabama: Air University Press, 1989), 106-134.

<sup>&</sup>lt;sup>3</sup> Quoted in Futrell, *Ideas*, *Concepts*, *Doctrine*, vol. 1, 134.

<sup>&</sup>lt;sup>4</sup> AAF Memorandum No. 20-20, *Authority and Operation of the Army Air Forces Board and its Relationship to Headquarters, Army Air Forces*, 10 December 1943, 245.602-1 Appendix B, IRIS No. 00156444, AFHRA.

<sup>&</sup>lt;sup>5</sup> Historical Section, AAF Center, *History of the Army Air Forces Board: Part I, Organizational Development* (Orlando, Fl: Historical Section, AAF Center, 1946), 69, 245.6-1, IRIS No. 00156432, AFHRA; Historical Branch, AC/S-2, Air Proving Ground Command, *AAF Board: Its Divisions and Their Work, 1943-1946*, vol. 1, 1946, p. 69, 240.04-6 v. 1, IRIS No. 00155452, AFHRA.

Brigadier General E. L. Eubank, its executive director, assigned Momyer to the Tactics Division, which conducted projects supporting, "the determination of tactics and techniques of aircraft and Air Force employment, the accomplishment of tactical studies and tests from which information and recommendations were to be used in carrying out Army Air Forces operational plans, the preparation of training standards, and the compilation and maintenance of data on tactical characteristics of aircraft and related equipment." Of the three branches in the Tactics Division: Strategic, Tactical, and Special; Momyer became the head of the Tactical Branch.<sup>6</sup>

In the role of Tactical Branch Chief, Momyer attended daily staff conferences of the AAF Board. Occurring at 8:30 each morning, General Eubank designed these meetings so that the approximately 15 division and branch chiefs could discuss the board projects which generated the most outside interest. In Momyer's first meeting on December 22, 1943, the AAF Board discussed projects ranging from the proper turn radius of an aircraft taxiing sixty miles per hour to the modification of a B-24 bomb bay to permit vertical bombing, and the in-flight refueling of one bomber with another. At this meeting, Momyer presented ideas on the organizational structure of an all-purpose Air Force. Through attendance at these morning meetings, Momyer not only gained the knowledge of the works of other divisions, but also participated in a discussion forum where Eubank expected each division and branch chief to express opinions on the ongoing projects and their associated tactical and doctrinal implications.<sup>7</sup>

Momyer's experiences in North Africa and Italy made him a valuable member of the AAF Board team. As Eubank later remembered, the Board "began to get more influence because we were bringing back people from overseas who had been in combat." Each member of the AAF Board frequently attended conferences and meetings on various subjects across the United States, but Momyer garnered a number of special requests. On one occasion,

-

<sup>&</sup>lt;sup>6</sup> Air Proving Ground Command, *AAF Board*, vol. 1, 69; Personnel Roster, Army Air Forces Board, 1 November 1943 - 1 July 1944, 245.6041, IRIS No. 00156479, , AFHRA.

<sup>&</sup>lt;sup>7</sup> Minutes of daily morning meetings of Army Air Forces Board, 21 October 1943 - 31 January 1944, 245.6051-2, IRIS No. 00156493, AFHRA.

<sup>&</sup>lt;sup>8</sup> Major General Eugene L. Eubank Oral History, by Mr. Hugh N. Ahmann, 30 June – 1 July 1982, p. 128, K239.0512-1345, IRIS No. 1052996, AFHRA.

Brigadier General Glenn Barcus, the commanding general of I Fighter Command at Mitchell Field, New York, asked Momyer to attend a fighter training conference. At this three day conference, Momyer joined representatives from Headquarters Army Air Forces, AAF Training Command, AAF Proving Ground Command, and all the fighter commands of the continental air force.<sup>9</sup>

One of the first projects Momyer worked on was the determination of new fighter aircraft formations. Just before Momyer's arrival, Major General Barney M. Giles, the chief of the Air Staff, asked the board to investigate the operations of and develop tactical doctrine for the "beehive" tactics that Allied fighters were using to cover bomber formations in the European Theater of Operations. Giles intended this project to provide a foundation for the training of Allied fighter aircrew. Momyer supervised the project's testing process while the 313th Fighter Squadron of the 50th Fighter Group based at Keystone Army Air Field in northeast Florida conducted the flight tests. The final report recommended specific training regimens for pilots and committed to paper the various formations and tactics for use in that training. Although, as Eubank once stated at a morning staff meeting, they were "a helluva long way from the War," Momyer and the other members of the AAF Board could still contribute to the fight. 10

While the project on fighter formations probably brought Momyer back to the skies of the Mediterranean, his work in other areas gave him a venue to express his views on the application of airpower. In March of 1944, after a reorganization of the Tactics Division, Momyer moved from chief of the Tactical Branch to chief of the Combined Operations Branch, which was then primarily responsible for projects concerning the interdependence of airpower with the land and sea components. On July 17, 1944, Major General Howard A. Craig, the assistant chief of the Air Staff, OC&R, ordered the AAF Board to study the

<sup>&</sup>lt;sup>9</sup> Brigadier General G. O. Barcus, Commanding General, HQ I Fighter Command, to Brigadier General Hume Peabody, Commanding General, AAF Tactical Center, letter, 24 January 1944, 245.6051, IRIS No. 00156483, AFHRA.

<sup>&</sup>lt;sup>10</sup> AAF Board Minutes, 21 October 1943 - 31 January 1944; Historical Branch, AC/S-2, Air Proving Ground Command, *AAF Board: Its Divisions and Their Work, 1943-1946*, vol. 2, 1946, p. 315-317, 240.04-6 v. 2, IRIS No. 00155453, AFHRA.

coordination of air and land power and determine the "doctrine and tactics for the isolation of a battlefield by employment of air power."<sup>11</sup>

Using data on the Allied campaigns in Normandy, Southern France, and Italy as well as personal interaction with pilots with recent air and ground experience in combined operations, the study aimed to evaluate "combined airsurface operation" with an eye to discerning "principles and methods of air attack." The study concluded the "attack on enemy rear area objectives and sea forces for the purpose of isolating the battlefield," is only second to the achievement of air superiority in the accomplishment of the phases of a tactical air campaign. Because even under perfect conditions, the battlefield may not be completely isolated by air attack, study authors added the terminology, "control of surface communications" to better reflect the reality of what airpower could accomplish. The study addressed the unique challenges of targeting railroads, roads, and sea lines of communication, and then presented a general plan for the conduct of interdiction operations. 12

Later, in his own book, Momyer drew upon what he learned from this study. He believed for interdiction to be effective, the enemy had to be subjected to constant pressure so they would have a great need for supplies. Even if the enemy had the will to fight, they could not continue without sustaining material. He then outlined the concepts of interdiction learned through World War II campaigns, which he stressed were not steps, but principles: strike at the source of the war material, attack the weak elements of the supply system, maintain continuous attacks against the major supply lines supporting the fielded enemy forces, focus the effort on the supplies and system before they reach the field, and keep pressure on the enemy to force a high consumption rate of supplies.<sup>13</sup>

The AAF Board was able to draw upon a number of sources for the kind of data required to produce studies such as "Isolation of the Battlefield." First, the board received reports from organizations operating in theater. As an example, during the morning staff meeting on May 26, 1944, Momyer discussed

<sup>&</sup>lt;sup>11</sup> Air Proving Ground Command, *AAF Board*, vol. 1, 69; Report of the Army Air Forces Board, "Isolation of the Battlefield," Project No. 3763A373.1, 17 October 1944, 1-2, MICFILM 28222, IRIS No. 205-3567, AFHRA.

<sup>&</sup>lt;sup>12</sup> "Isolation of the Battlefield," 5-13.

<sup>&</sup>lt;sup>13</sup> Momyer, Airpower in Three Wars, 187-188.

what General Ira Eaker's Mediterranean Allied Air Forces had learned about air support of ground operations. Second, the board sent liaison officers to the theaters of operations. These officers were to gain information on ongoing combat operations and report back to the board. The board reviewed these reports in their morning staff meetings. In one such meeting on June 7, 1944, Momyer disputed a statement on lessons learned in the Mediterranean Theater by one of the board's liaison officers. Possibly in the belief that 'if you want something done right, do it yourself,' Momyer volunteered for liaison duty, and in mid-August 1944 set off for the Pacific Theater to observe the United States Navy in action.<sup>14</sup>

Momyer spent his time in the Pacific with Vice Admiral Marc A.

Mitscher's fast carrier Task Force 38 (TF 38). Mitscher, captain of the carrier USS *Hornet* for Doolittle's mission over Tokyo, now commanded a task force that operated some 1,077 aircraft. From August through early October, TF 38 together with the land-based air power of the Fifth and Seventh Army Air Forces, conducted operations both to support amphibious landings and to destroy Japanese airpower in the Philippines. Momyer observed naval air operations in support of the Marine Corps and Army ground operations, as well as the Navy's pursuit of air superiority and attacks on Japanese sea and air lines of communication. Momyer left the Philippines just before the Battle of Leyte Gulf in October 1944. 15

Shortly after his return to Orlando, Momyer moved up in the AAF Board hierarchy, becoming the new executive to the president. This promotion was bittersweet for Momyer. Although it was a step up, he would no longer be intimately involved in the preparation of doctrine and studies that detailed airpower application in combined operations. Instead, his primary role was to assist and advise the Board president (recently changed from the executive director), represent him in his absence, and to supervise and coordinate the

<sup>&</sup>lt;sup>14</sup> AAF Board Minutes, 1 May - 30 June 1944, 245.6051-2, IRIS No. 00156495, AFHRA; Momyer Biography in *TAC History, Mar - Dec 1946*, vol. 2, 417.01, IRIS No. 00198691, AFHRA.

<sup>&</sup>lt;sup>15</sup> H. P. Willmott, *The Battle of Leyte Gulf: The Last Fleet Action* (Bloomington, Indiana: Indiana University Press, 2005), 25-26; Wesley Frank Craven and James Lea Cate, ed., *The Army Air Forces in World War II*, vol. 5, *The Pacific: Matterhorn to Nagasaki* (Chicago: University of Chicago Press, 1949), 294-296.

divisions of the board. On the same day that Momyer became board executive, Eubank, the Board president, announced that he would be absent for 30 days. Thus, Momyer began his term as the executive of the board by acting as president for a month. 16

In his first month on the job, Momyer suffered through the administrative trial by fire that the orchestration of AAF Board projects had become. In its role as tactics developer, the AAF Board was responsible for supervising testing programs at both the Tactical Center and the Proving Ground Command. Ideally, the Proving Ground Command would perform operational suitability tests on aircraft and equipment as military weapons while the Tactical Center would perform tactical suitability tests to determine how aircraft and equipment should be employed as an instrument of warfare. Although the board was not responsible for supervising tests at Wright Field, it could also call upon the Material Center there if it needed a test involving the research or development of new aircraft. In addition, because the Proving Ground and Tactical Center were often short on qualified personnel, AAF Board members not only reviewed and approved reports from these agencies, but also served as project supervisors.

In January 1945, Momyer and General Auby Strickland became acquainted once again when Strickland became the president of the AAF Board. It was a brief stay for Strickland, who left again in October to take command of McChord Field in Washington. The Air Staff once again reorganized the Army Air Force Tactical Center agencies in June 1945. Shortly after the war in Europe ended, AAFTAC became the Army Air Forces Center (AAF Center) with three subordinate organizations: the AAF School, the AAF Board, and Proving Ground Command. The AAF Board no longer had to report through the assistant chief of staff for OC&R but instead was directly responsible to the commanding general of the Army Air Forces for reporting on "all general policies affecting personnel, training, equipment, and organization." The board was also to determine lessons from combat operations, develop doctrine and tactics to be used in training, and review and make recommendations on materiel and

<sup>&</sup>lt;sup>16</sup> Minutes of daily morning meetings of Army Air Forces Board, 1 Jul 1944 - 13 Jan 1945, 245.6051-2, IRIS No. 00156496, AFHRA; Historical Section, AAF Center, *History of the Army Air Forces Board: Part I*, 69.

equipment used by the AAF. In its doctrine development role, the AAF Board was responsible for the preparation, review, and revision of all Field Service Regulations and War Department Field Manuals affecting the AAF.<sup>17</sup>

Although working at the heart of Army Air Forces doctrine development may have been rewarding for Momyer, his nearly seven months in the mostly administrative role of AAF Board executive began to take a toll on the combat leader. At the end of June 1945, in response to a letter from Colonel Henry Viccellio, the chief of the Fighter Division of the Commitments and Requirements Office at the Air Staff, Momyer wrote, "I hope that you are having more success with your future plans than I am having." Also reflecting the wandering of Momyer's mind to other places and other times, he asked Viccellio to "investigate the disposition of the 33rd Fighter Group for redeployment when it returns from the China-Burma-India Theater." Although his mind was on future possibilities, Momyer could not help but to check in on the 33rd that had shaped his military experience. <sup>18</sup>

Momyer served for one more year alternately as the executive to the board and the acting president, only leaving when the AAF Board was disbanded in June of 1946. In a 1972 letter, Momyer remembered his time at the AAF Board. "It was a fine outfit and provided a very needed service to the Air Force," he wrote, adding "we don't have any place in the Air Force today that ties together new concepts, doctrine, and hardware. The board provided this essential task in a very productive manner." Eubank's memory of Momyer's service on the board underscores his dedication to the mission there, "He could see that he was making great contributions toward the successful conduct of the war, and I would say he was proud to be there and worked well." That

<sup>&</sup>lt;sup>17</sup> AAF Regulation No. 20-14, *Organization: AAF Center and AAF Board*, 1 June 1945, 245.606, IRIS No. 00156513, AFHRA.

 <sup>&</sup>lt;sup>18</sup> Colonel W. W. Momyer, Executive, AAF Board, to Colonel Henry Viccellio, Headquarters, AAF, Letter, 30 June 1945, 245.6051, IRIS No. 00156485, AFHRA
 <sup>19</sup> General William W. Momyer, Commander, TAC, to Lieutenant Colonel Ellis C. Vander Pyl, Letter, 17 November 1972, 168.7041-58, IRIS No. 1001170, AFHRA.
 <sup>20</sup> Major General Eugene L. Eubank Oral History, by Mr. Hugh N. Ahmann, 30 June – 1 July 1982, p. 128, K239.0512-1345, IRIS No. 1052996, AFHRA.

same month of June 1946, Momyer learned that he would once again work for General Quesada.<sup>21</sup>

In March, General Spaatz had ordered Quesada to take command of the new Tactical Air Command (TAC) with headquarters at Drew Field in Tampa, Florida. Spaatz wanted Quesada to lead TAC as it took its place next to the other two functional commands of the Army Air Forces; Strategic Air Command (SAC) and Air Defense Command (ADC). Since returning to the United States in April 1945, after leading the Ninth Tactical Air Command in close cooperation with the First U. S. Army in Europe, Quesada had served briefly in AAF Headquarters, before commanding Third Air Force. As the Third Air Force became TAC, Quesada maintained command of the organization.<sup>22</sup>

At the close of World War II, the top leaders of the Army Air Forces were primarily those with bomber backgrounds. SAC encompassed the mainstay of that experience, since it was founded upon the Eighth and Fifteenth Air Forces, the two primary organizations that carried the strategic air offensive to the heart of Germany. TAC emerged from General Eisenhower's desire to have a force designated for air-to-ground operations. General Spaatz, now the Commanding General of the Army Air Forces, knew that Eisenhower's support of the quest for an independent Air Force was dependent upon ensuring that tactical aviation had its own organization. Thus, Spaatz formed TAC with the Third Air Force as the troop carrier organization and the Ninth and Twelfth Air Forces, the organizations primarily responsible for air superiority, interdiction, and close air support in Europe during World War II, as the backbone of the command. Quesada was a logical choice to head the command. He selectively manned it with those individuals whose wartime experience would best contribute to the pursuit of excellence in the arena of tactical airpower.<sup>23</sup>

Recognizing the need to be located near Army and Navy organizations that would be crucial to the service cooperation required in the endeavor,

<sup>&</sup>lt;sup>21</sup> AAF Letter 201-10, 3 June 1946, in *Air Proving Ground Historical Data*, 2 Sep 45 – 30 *Jun* 49, vol. 2, 240.01v. 2, IRIS No. 00155430, AFHRA.

<sup>&</sup>lt;sup>22</sup> Caroline Frieda Ziemke, "In the Shadow of the Giant: USAF Tactical Air Command in the Era of Strategic Bombing, 1945 – 1955" (PhD Dissertation, Ohio State University, 1989), 10; TAC Biographies in *History of the Tactical Air Command, March 1946* – *December 1946*, vol. 2.

<sup>&</sup>lt;sup>23</sup> Walter J. Boyne, *Beyond the Wild Blue: A History of the US Air Force* (New York: St. Martin's, 1997), 30-31.

Quesada moved TAC Headquarters to Langley Field, Virginia in May 1946. The headquarters of Army Ground Forces located at Fort Monroe and the Atlantic Fleet Headquarters at Norfolk were both a short drive from Langley. To support his mission of "providing and operating that portion of the AAF which is maintained in the United States . . . for cooperating with land and sea forces in the conduct of land and amphibious operations," Quesada built a Headquarters staff on a traditional air staff structure with sections for personnel, intelligence, operations, and resources. Not until Momyer's arrival at Langley in July 1946, however, did Quesada create a section for plans, with Momyer at the helm.<sup>24</sup>

During the next three years at TAC, Momyer served in a function very similar to his time at the AAF Board. Although his title changed a number of times, his three years at TAC were devoted to planning. Momyer supervised the staffs that created war plans, doctrine, and exercise plans for TAC. In this effort, Momyer worked with other Airmen who also thought deeply about the role of an Air Force in combat. The most notable of these, Quesada, Brigadier General Robert M. Lee, and Brigadier General Glenn O. Barcus, would challenge, influence, and be influenced by Momyer's emerging views on the application of airpower.

Barcus had been Momyer's first squadron commander in the 35th Pursuit Squadron. He remembered the young Lieutenant Momyer as not "being the intellectual type, particularly . . . he was very practical and down to earth." But his perspective on Momyer changed when they were assigned together on the TAC staff, where, "when I saw him in plans in TAC, I realized that he was the intellectual type, and I just was pleasantly surprised that he was so darned good at planning." Barcus' comments reveal Momyer was already establishing himself as an intellectual force for tactical airpower, a trend which continued and strengthened in the years ahead. <sup>25</sup> As Quesada stated in an interview many years later, Momyer was the "driving force very often behind joint

\_

<sup>&</sup>lt;sup>24</sup> Ziemke, "The Shadow of the Giant," 29-33; *History of the Tactical Air Command, March 1946 – December 1946*, vol. 1, 417.01, IRIS No. 00198690, AFHRA; Mission statement from AAF Reg. No. 20-19, "Organization, The Tactical Air Command," 10 October 1946 quoted in *History of the Tactical Air Command for 1947*, vol. 1, p. 2, 417.01, IRIS No. 00198695, AFHRA.

<sup>&</sup>lt;sup>25</sup> Lieutenant General Glenn O. Barcus Oral History, by Lieutenant Colonel John N. Dick, Jr., 10-13 August 1976, p. 359, K239.0512-908, IRIS No. 01032024, AFHRA.

maneuvers with the Army, and he believed in it very deeply." In his first few months on the job, Momyer got right to work in planning Operation MOUNTAIN GOAT, a joint amphibious exercise projected for California in November 1946.<sup>26</sup>

MOUNTAIN GOAT was the first amphibious training exercise since the end of World War II to involve the Army, Navy, and Army Air Forces. The Twelfth Air Force, Quesada's tactical air force for the west coast, would cooperate with General Joseph Stilwell's Sixth Army and Admiral Frederick Sherman's Fifth Fleet in an amphibious assault on the beaches at Camp Pendleton, California, with a follow-on overland attack from the southwest corner of the Pendleton reservation. The air portion of the exercise involved, among others, two AAF Fighter Groups, a Light Attack Bombardment Group, a Troop Carrier Group, a Tactical Control Group, two Carrier Air Groups, and two Marine Air Groups. The AAF units alone encompassed over 250 aircraft. A Navy rear admiral would lead the Joint Expeditionary Forces, and control the air assets until the amphibious landing was ashore; then control of the air assets would pass to the Twelfth Air Force. The counter-air operations of the force were simulated. The exercise consisted primarily of operations in direct support of ground troops as well as interdiction of enemy supply routes behind the battle line. C-47's participated in both airborne operations (stuffed dummies were dropped due to lack of airborne troop support) and re-supply operations.27

Exercise participants praised the experience, with the commander of the Amphibious Forces specifically mentioning the "splendid Air Support performance of the AAF, Navy, and Marine air units." As in the amphibious assaults on Sicily and Italy, the most troublesome development in the exercise was the difficulty in air-to-ground communications. These troubles arose from both equipment and planning deficiencies. The participants hoped that lessons

<sup>&</sup>lt;sup>26</sup> Lieutenant General Elwood R. Quesada Oral History, by Lt Col Stephenson and Lt Col Long, US Army Military History Institute, 12 – 13 May 1975, p. 34, K239.0512-838, IRIS No. 1037750, AFHRA.

<sup>&</sup>lt;sup>27</sup> Ralph D. Bald, Air Force Participation in Joint Amphibious Training Exercises, 1946-1950, USAF Historical Study 94 (USAFHS-94) (Maxwell AFB, AL: USAF Historical Division, Air University, 1954), 1 - 20.

learned in MOUNTAIN GOAT in this regard could be applied in future joint operations.  $^{28}$ 

The exercise also highlighted the differences in Navy and AAF conceptions of the control of airpower. The Navy view subordinated airpower in support of an amphibious operation to the joint force commander. That commander, in turn, often allocated control to the attack force commander in the area of the operation. Although this senior naval officer may have been qualified in both aviation and surface warfare, in this set-up there would not be a single, independent advocate for the most effective and efficient application of airpower. The AAF viewed airpower as equal with surface power and thus maintained that control of the airpower, even in direct support of an amphibious operation, should be in control of an AAF Airman. Momyer continued to observe these doctrinal differences in later exercises.<sup>29</sup>

Momyer and the other Airmen in TAC watched carefully as drastic budgetary constraints following World War II forced Spaatz to focus his resources on the strategic mission. In late 1946, Spaatz had outlined the service's mission. First, the AAF was to provide a long-range strategic striking force that could attack the industrial capacity and war-making potential of any future enemy. Second, the service aimed to provide the capability to rapidly mobilize from peace to war. He therefore labeled "the long-range bomber groups and their protective long-range fighter groups organized in our Strategic Air Force," as the backbone of the service.<sup>30</sup>

Although TAC represented a commitment to air to ground cooperation, it did not constitute a large portion of the air arm's force structure. Many tactical air units were assigned to the commands that corresponded with their geographic locations. The Far East Air Forces, the United States Air Forces in Europe, the Alaskan Air Command, the Pacific Air Command, and the Caribbean Air Command all contained numbers of light bombers, fighters, tactical reconnaissance, and troop carrier aircraft. TAC only possessed one light bombardment group, three fighter groups, three tactical reconnaissance

<sup>&</sup>lt;sup>28</sup> Ralph D. Bald, Air Force Participation in Joint Amphibious Training Exercises, 1946-1950, USAF Historical Study 94 (USAFHS-94) (Maxwell AFB, AL: USAF Historical Division, Air University, 1954), 20.

<sup>&</sup>lt;sup>29</sup> USAFHS-94, 26-36, 127-129.

<sup>&</sup>lt;sup>30</sup> Futrell, *Ideas, Concepts, Doctrine*, vol. 1, 215.

groups, and three troop carrier groups. At the time, the air arm was a 55 group organization, and TAC possessed less than 20% of the total force structure, a basic allocation that remained even after the National Security Act of 1947 created a separate Air Force.<sup>31</sup>

As both an Army Air Forces and now an Air Force planner, Momyer's job was to mesh the strategy decided upon at higher headquarters with wartime plans. Exercises were the method by which these plans were vetted and practiced. As resources became more constrained and the unifying force of an enemy became but a memory, service differences became more pronounced in these joint exercises. More doctrinal differences surfaced in an operation called Exercise ASSEMBLY. Conducted in the spring of 1948, ASSEMBLY was to be the first major joint training exercise involving the Army and the newly independent Air Force. In the training scenario, an Aggressor nation had invaded the southeastern United States and had subsequently been evicted by conventional force. The current situation in the exercise involved small enemy guerilla forces operating in the Southeast with continuing support from the main forces of the aggressor nation still located in the Caribbean. The main objective of the friendly forces in ASSEMBLY was to capture or destroy the guerrilla forces. The exercise began with a preliminary phase of command post exercises and then subsequently moved into a field exercise. In the field exercise, TAC air assets participated in both troop transport missions with the 82nd Airborne Division and in fighter missions in close support of the Army's V Corps. Once again, the Air Force received high praise from the ground commanders in the exercise, with some officers thinking there might have even been too much air support, which might lead ground commanders to think they could rely on receiving more air support than would actually be present in a real conflict.32

In the exercise after-action report, however, the senior Marine observer noted air power operations should be the providence of ground commanders, a position consonant with Marine Corps air doctrine which held the ground

\_\_

<sup>&</sup>lt;sup>31</sup> Futrell, *Ideas, Concepts, Doctrine*, vol. 1, 224.

<sup>&</sup>lt;sup>32</sup> Ralph D. Bald, *Air Force Participation in Joint Army - Air Force Training Exercises*, *1947-1950*, USAF Historical Study 80 (USAFHS-80) (Maxwell AFB, AL: USAF Historical Division, Air University, 1955), 1 - 7.

commander should exercise operational control of air support. In a direct reply to this critique, Momyer noted the distinct difference in philosophies between the Navy and the Air Force at the time. "The Air Force," he said, "has consistently and with adequate factual logic maintained that Air Power is not subordinate nor subservient to a surface force. The Navy, on the other hand, has never recognized the Air as being a distinct and co-equal force of a surface force." Momyer further added that in the Pacific in World War II, "Marine Aviation rarely engaged in the attainment of the primary objective in the surface campaign other than direct support." If the Air Force subscribed to this same philosophy, Momyer wrote, "the Air Force would have never engaged in counter air operation for the attainment of air superiority, the isolation of a battlefield, nor the maintenance of an interdiction campaign. The Air Force maintains the factors enumerated above are the determining criteria as pertains to the role of Air Power in assisting the surface forces in the prosecution of a surface campaign." Momyer's response mirrored the three priorities of tactical airpower as presented in War Department Field Manual 100-20, and highlighted his firm belief that the application of these priorities had turned the tide in Tunisia. Momyer closed his energetic response to the Marine's critique stating, "The Air Force cannot subscribe to any principles which subordinate Air Power to a Surface force nor can the Air Force subscribe to those tenets that permit Air Power to become of secondary importance in the destruction of an enemy's will to wage war."33

Although Momyer's argument could portray the traditional theory that independent airpower should rule the day, in fact it was much more. Momyer grounded his statement in the method of "assisting the surface forces in the prosecution of a surface campaign." This representation of airpower established a middle ground all too often ignored in the history of airpower thought. Airpower history traditionally records the argument as a battle between strategic bombing zealots, and those who wished to subject airpower to the whims of the ground commanders. Momyer and his boss, Quesada, saw

<sup>&</sup>lt;sup>33</sup> USAFHS-80, 6; War Department Field Manual 100-20, *Command and Employment of Air Power*, 21 July 1943, 7; Colonel William Momyer, TAC Plans and Requirements Division Chief, , to Deputy Chief of Staff for Operations, Message, Jul 1948, in *History of the Tactical Air Command for the period 1 January through 30 November 1948*, Volume *III: Operations and Training*, 417.01 Vol. III, AFHRA.

the role of airpower in a different light. In a 1975 interview, Quesada put this early TAC philosophy into words:

I always advocated very strongly as I was able to that the armed forces would be benefited by this (tactical air forces within a separate Air Force), influenced primarily by the fact that the air forces know-how to use their weapons better than the Army or the Navy. Therefore, the tactical air forces should not be Army-oriented; they should be oriented to participate in the ground battle. They should be permitted to use their special knowledge of their weapon to do it. The best way to make this concept a success was by doing it well, so that the Army would be the first to admit that the tactical air forces under the jurisdiction of the United States Air Force was to their benefit, and that could only be accomplished if the Air Force did their job with extreme diligence and extreme enthusiasm and extreme efficiency. 34

Both Momyer and Quesada witnessed the differences between the use of tactical airpower under control of a ground commander in North Africa and its centralized control from an air component of a joint and combined force. This experience left indelible marks on their impressions of the correct application and control of tactical airpower in a theater of conflict.

Any ambitions Momyer had for further development of a tactical airpower concept were limited by shrinking resources. Although the Air Force had hoped to field a balanced force of 70 combat groups by the end of 1948, budget realities necessitated a different mission focus for the new service. First, civilian and military leaders believed the Air Force must be capable of launching an atomic air offensive against the centers of gravity of the Soviet Union, both their war making capacity and their desire to continue the conflict. Second, the service should be able to defend the United States and selected base areas against an air attack. This capability would be provided on 'an austerity basis.' Last, the service should provide the air component necessary to maintain an initial offensive until adequate forces could be generated from the mobility reserves.<sup>35</sup> The most complete of the existing contingency plans, code-named HARROW, envisioned a paralyzing blow against the vital elements of the Soviet system to slow the Soviets while the United States mobilized for war. With this

<sup>&</sup>lt;sup>34</sup> Quesada Oral History, 1.

<sup>&</sup>lt;sup>35</sup> Futrell, *Ideas, Concepts, Doctrine*, vol. 1, 242.

new mission set, the Air Force's emphasis on strategic preparedness became an even more important aspect of the new service's identity.<sup>36</sup>

In order to work within Truman's budgetary constraints and this new strategic focus, General Hoyt Vandenberg, the Air Force Chief of Staff, decided to reduce TAC and ADC to subordinate commands of Continental Air Command (ConAC). Because the capabilities of both commands could be used for the defense of the continent and support of a land offensive, joining them under one command cut down on overhead costs while still providing capability. TAC and ADC lost their logistical and administrative responsibilities, becoming planning and operational headquarters. Shortly after this organizational change, Quesada left Langley for a job in Washington, D.C. and General Lee assumed command of TAC. Although Vandenberg offered Quesada the command of ConAC, he did not accept. Quesada believed the organizational change broke the commitment Spaatz had earlier made to Eisenhower to maintain adequate TAC assets. The Army Ground Force Headquarters at Fort Monroe also objected to the change, as air support for ground operations now no longer had a dedicated command.<sup>37</sup>

Just before the organizational change occurred, Momyer opined, "Present air concepts indicate that the Tactical Air Command will not be committed to an overseas action for the first two years of another war since these units will be primarily used in support of a surface action which is not conceived to occur prior to this date." Further, "the Tactical Air Command would not be directly involved in another conflict unless the atomic offensive failed and the war degenerated into a conventional air-surface action." Momyer wrote these thoughts two short years before the Korean War would render him wrong.<sup>38</sup>

-

John Schlight, "Elwood R. Quesada: Tac Air Comes of Age," John L. Frisbee, ed.,
 Makers of the United States Air Force (Washington, D.C.: Air Force History and
 Museums Program, 1996), 202: Steven L. Rearden, "U.S. Strategic Bombardment
 Doctrine Since 1945," R. Cargill Hall, ed., Case Studies in Strategic Bombardment
 (Washington, D.C.: Air Force History and Museums Program, 1998), 391.
 <sup>37</sup> Ziemke, "In the Shadow of the Giant," 67-73; Futrell, Ideas, Concepts, Doctrine, vol. 1,

<sup>&</sup>lt;sup>37</sup> Ziemke, "In the Shadow of the Giant," 67-73; Futrell, *Ideas, Concepts, Doctrine*, vol. 1 242; Warren A. Trest, *Air Force Roles and Missions: A History* (Washington, D.C.: Air Force History and Museums Program, 1998), 136.

<sup>&</sup>lt;sup>38</sup> History, Continental Air Command, 1 December 1948-31 December 1949, 3, 8, quoting a

study by Col William W. Momyer, director of plans, Tactical Air Command, subject: An Evaluation

Despite the fact that TAC became subordinate to ConAC, Momyer and other members of the staff remained intimately involved in air and surface doctrinal issues. Early in 1948, officials at Air Force headquarters identified TAC as an excellent place to oversee the development of tactical techniques and doctrine. Under Momyer, in the TAC plans staff, a doctrine directorate represented the Air Force on a number of interservice working groups responsible for doctrine development. In early 1949, both Momyer and Lee were personally involved in the business of attempting to create joint doctrine. The two met with Navy and Army officers at Norfolk and Fort Monroe in an attempt to reconcile views on tactical airpower. These discussions foreshadowed areas of interservice tension regarding the employment of airpower in conflicts to come. The Army, although convinced of the importance of air superiority, was inclined to treat it as a given. Even after World War II, many Army ground commanders still wanted operational control of tactical air forces, specifically for close air support missions. The Navy, likewise, did not want to surrender the control or tasking of naval airpower. These tensions were not resolved and continued to fester in airpower circles.<sup>39</sup>

Years later, Lee remembered that the Joint Chiefs of Staff and the Air Staff actually passed three joint mission subject areas to TAC for doctrinal development: Joint Action Air Support of Amphibious Action, a joint effort with the Marines at Norfolk Naval Base; Joint Action Airborne Operations, a joint effort with the Airborne Center at Fort Bragg; and Joint Action Support of Ground Forces, a joint effort with the Army Field Forces. Coordination of the first two documents went without major setbacks. But when the Army Field Forces and TAC returned the Joint Action Support of Ground Forces document to the Joint Staff, the two entities agreed on only ten percent of the document. To attempt to resolve the issue at another level, "two people from each headquarters would come to Washington and stay there and get in a room . . . and hammer the thing out." Lee recalled, "I designated myself and Momyer for

of the Exchange of the 31st Fighter Group for the 82d Fighter Group, 10 August 1948, 417.01, IRIS No. 00198700, AFHRA.

<sup>&</sup>lt;sup>39</sup> Futrell, *Ideas, Concepts, Doctrine*, vol. 1, 376; Richard H. Kohn and Joseph P. Harahan, ed., Air Superiority in World War II and Korea; An Interview with Gen. James Ferguson, Gen. Robert M. Lee, Gen. William Momyer, and Lt. Gen. Elwood R. Queseda (Washington, D.C.: Office of Air Force History, 1983), 69.

the Air Force people." Further, "I am telling you that we almost worked out with the Army, getting this together in common language, pretty much along the Air Force line. We would give a point here and there, but the main idea of control of the air was on our side." Just before they reached an agreement the Marine representative checked back with his superiors. Upon return to the meeting, the Marine could not agree to "four or five points." Since the Army had already agreed to these points, and a further compromise was not likely, the committee submitted the document with the dissent of the Department of the Navy. Although the two weeks of dialogue undoubtedly educated Momyer even further in the tactical air support views of all services, failure to garner a consensus agreement continued to hinder Momyer's concept of centralized control of tactical airpower for years to come. 40

The Navy, and particularly the Marine Corps, vision of tactical air support was put into words in October 1949. Brigadier General Vernon E. Megee, the assistant director of Marine Corps aviation, testified for the House Armed Services committee hearings on the status of the national defense program. He attested evidence clearly showed tactical airpower and not strategic bombing was decisive in the Atlantic and Pacific theaters. He also felt the Air Force was neglecting tactical airpower to pursue theories of strategic bombing. Further, he testified that the Air Force's "traditional doctrinal insistence on coequal command status at all levels of contact with the ground forces . . . deprives the Army commander of operational control over his supporting elements and requires that the ultimate decision must be made at the level of the highest echelon, in case of dispute between ground and air commanders."<sup>41</sup> This clearly represented a different approach from Momyer's vision of the centralized command and control of airpower.

In the same hearings, the testimony of the Army Chief of Staff, General J. Lawton Collins, provided evidence that Momyer's coordination with the Army in doctrine discussions paid dividends. The Army Chief did not believe that the Air Force was neglecting tactical aviation. He remembered from his World War II experience, "the tactical air forces were able both to support the ground forces

-

 $<sup>^{40}</sup>$  General Robert M. Lee Oral History, by Lieutenant Colonel John N. Dick, Jr., 21-24 June 1977, p. 277-280, K239.0512-950, IRIS No. 1104915, AFHRA.

<sup>&</sup>lt;sup>41</sup> As quoted in Futrell, *Ideas, Concepts, Doctrine*, vol. 1, 253.

and to assist in the safe conduct of our strategic bombers in their missions of destruction and isolation of the battlefields."<sup>42</sup> On the subject of joint doctrine development, Lawton testified that the Army and Air Force were in full cooperation but that he was frustrated with the progress being made. Without specifically saying so, Lawton blamed the Navy and Marine Corps for holding back the discussions.

In addition to joint doctrine development and coordination, Momyer's plans staff fought to keep tactical airpower relevant in an Air Force rapidly coming to be dominated by strategic attack and the employment of atomic weapons. Momyer initiated a study of "the tactics and techniques of employment of Tactical Air Power" to examine "all aspects of tactical air operation in order to assure that tactical air doctrine is current and valid." The study, entitled "Tactical Air Operations," was to be presented to a newly formed Board of Review for Tactical Air Operations headed by Quesada.<sup>43</sup>

Momyer wrote much of the document General Lee presented to the review board in June of 1949. "Tactical Air Operations" presented an encompassing vision for tactical airpower that included policy statements, a concept of tactical air operations, methods and procedures of implementing the concept, basic principles, command and control of tactical air operations, determination and allocation of effort to be applied, and aircraft and equipment necessities. In restating the concept of the employment of tactical airpower, Momyer wrote that it could support the "strategic air offensive by attriting the enemy Air Force, destruction of the mobile transportation facilities of an enemy nation, and the isolation of deployed enemy field forces from their source of sustenance." Further, tactical airpower could support a "limited surface campaign by the isolation of strategic base areas from penetration by enemy air and ground forces, and the subsequent participation in such military actions as required to expand the base areas into a strategic air base complex." Lastly,

<sup>&</sup>lt;sup>42</sup> As quoted in Futrell, *Ideas*, *Concepts*, *Doctrine*, vol. 1, 256.

<sup>&</sup>lt;sup>43</sup> Ziemke, "In the Shadow of the Giant," 87 – 93; Major General Robert M. Lee, Commanding General, Headquarters Tactical Air Command, to Lieutenant General George E. Stratemeyer, Commanding General, Continental Air Command, memorandum, 1949, in Supporting Documents 51-208, Inclusive, Section One: Organization and Mission of the Command, History of the Continental Air Command, 1 December 1948 – 31 December 1949, 419.01, IRIS No. 00198806, AFHRA.

tactical airpower could support "a major surface campaign designed to exploit the strategic air offensive by engaging military force of an enemy nation on the battlefield."<sup>44</sup>

Many years later, Momyer recalled what he saw as the two visions for the application of airpower at the time. Momyer saw a "basic philosophical split within the Air Force [during the late 1940's] on how people looked at future war. In essence the two functions that you really got down to were these; one was the prosecution of the strategic offensive against the enemy, and the other was the denial of his offensive against you (air defense)." Regarding the study presented to the review board, Momyer wrote, "the fundamental concept of tactical air operations is predicated on the application of Tactical Air Power against those enemy objectives or target complexes not having an immediate strategic significance as pertains to an imminent collapse of an enemy nation." Further, "It is evident that there are a large number of target systems that are not suitable for atomic attack yet have a strategic and tactical significance as pertains to the ability of an enemy to continue waging an effective and decisive war. Such a category of targets embrace the enemy's military force, transportation system, fuel system, industrial facilities, power systems and other varied types of target systems." In laying out these principles, Momyer argued for the continuing relevancy of the Tactical Air Command. 45

"Tactical Air Operations" represented more than just a fight for relevancy in the SAC-oriented Air Force of the late 1940s. At its heart, the document represents Momyer's emerging thoughts on the application of airpower. In crafting the document, Momyer broadened his views beyond those of his mentor, Quesada. His approach to orchestration of joint maneuvers with the Army and Navy displayed Momyer's recognition of the importance of close cooperation with surface forces, and at the same time, his recognition of the flexibility of the airpower instrument to do much more. His thoughts and writings on tactical airpower became more than what many at the time considered exclusively a ground support operation.

<sup>45</sup> Kohn and Harahan, Air Superiority, 63; TAC, "Tactical Air Operations," 1.

 $<sup>^{44}</sup>$  Tactical Air Command, "Tactical Air Operations," staff study presented to the Review Board, 21 June 1949, Policy Statements, 1, K168.15-43, IRIS No. 0472914, AFHRA.

Momyer later recalled the fiscal realities of this time period in Air Force history. "At a time when the Air Force was shrinking," he wrote, "it wasn't easy to find money for conventional tactical weapon systems. Understandably, most of the Air Force budget was earmarked for that part of the force which would have to deter or win a general nuclear war with the Soviet Union." The fact was, "Strategic forces received most of the Air Force dollars, and only those tactical forces that had a nuclear capability could demand and get substantial funding." Momyer felt, "even with these reduced forces and the emphasis on nuclear operations, however, there remained a high residuum of experience in non-nuclear operations from World War II." 47

Momyer's time at the AAF Board and TAC provided an opportunity to think about airpower following the experience of World War II. As much as he certainly would have enjoyed it, had Momyer returned from the war and delved back into air operations as a commander of another flying unit, he would have missed the chance to analyze the combat application of airpower. This analysis was important, but perhaps even more importantly, Momyer had to put the results of these studies in words, whether on paper or in discussions with his fellow Airmen and members of his sister services. This exercise and opportunity resulted in a rare combination of combat leadership with the operational and strategic insight brought on by hours of study. This became the foundation of Momyer's future contributions.

In the summer of 1949, Momyer received orders to report to Air University at Maxwell Air Force Base, Alabama to attend the Air War College. Momyer would attend the fourth class at the new school. The Air War College was designed "to promote sound concepts of the broad aspects of air power in order to assure the most effective development and employment of the air arm."<sup>48</sup> After ten years in the service, this experience would be Momyer's first with the formal military education system. Momyer and Pat packed up the family and moved to Alabama.

<sup>&</sup>lt;sup>46</sup> Momyer, Airpower in Three Wars, 3.

<sup>&</sup>lt;sup>47</sup> Momyer, Airpower in Three Wars, 3.

<sup>&</sup>lt;sup>48</sup> James A. Mowbray, Ph.D."Proficimus More Iretenti: The Air War College at Fifty."

## Chapter 6

## The School Years

On an unseasonably cool Monday in late August 1949, Momyer and 136 other military officers listened to Air University Commander General George C. Kenney deliver the welcome address to begin the Air War College (AWC) academic year. Charging the men with nothing less than "the maintenance and preservation of Western Christian civilization," Kenney's words set the stage for the next year of Momyer's life. The Air War College experience, Kenney said, sought to hone the "logical, sound, and original thinking" of students who would not need to look "in a reference book to find out how to make up their minds." He frankly let the new students know that any World War II experience they had was already "out of date." Instead of past experience, Kenney challenged the class to realize "the potentialities of modern weapons present entirely new points of departure for the student of warfare." Not intending to "make war a science," Kenney told the incoming students Air University did intend to "do the very best we can to prepare you for the next war, not for the last one." Sitting there in the crowd with Momyer that day was Colonel Benjamin O. Davis, Jr. The two were now AWC classmates and a very long way from the skies over Italy. With Kenney's words in mind, Momyer, Davis, and the rest of their classmates embarked upon the Air War College course of study.1

The curriculum for the 1949 academic year included three phases of instruction: academic refresher courses (written expression, problem solving, etc.), military science, and military planning. In the military science phase, the AWC sought both to "broaden the professional background of the student through an objective study and evaluation of World War II," and to "draw from a study of World War II and the present military structure and activities fundamental principles and lessons for future application." This objective seemed to directly contradict, if not invalidate, General Kenney's challenge to the incoming students. In the third, or planning phase, the AWC had three objectives. The first objective was to broaden the professional background of

<sup>&</sup>lt;sup>1</sup> "Talk to the Air War College by General George C. Kenney," 12 August 1949, p. 1-4, K239.1613-16, IRIS No. 0481306, AFHRA; "Air University History: 1 July 1949 – 31 December 1949," p. 211, 239.01, v. 1, AFHRA.

the student by a study of the current world economic, political, and military situations. Second, the school sought to develop student facility in the solution of military problems and their presentation by studying and promulgating solutions to current military problems. The third objective was to acquaint the student with the basic factors affecting the security of the United States. The AWC aimed to attain these objectives through a mixture of seminar discussions, guest speaker presentations, and critical writing by students. The production of a thesis on a current military problem was the capstone of the program. Taking Kenney's opening day address to heart, Momyer chose to write his thesis on the impact of nuclear weapons on tactical airpower.<sup>2</sup>

Momyer arrived at Air War College with a wealth of career experience. The Maxwell course of study now added to this foundation. The institution focused upon the impact of new technology on a new service. Commenting upon a study on research and development in the Air Force, Major General Orvil Anderson, the Air War College Commandant and noted strategic bombing advocate, wrote, "We cannot hope to win a future war on the basis of manpower and resources. We will win it only through superior technology and superior strategy." General Kenney added his endorsement to the report. "As long as we remain ahead of any possible opponent technically, we could not lose a war; but if we once fall behind technically, it is difficult to see how we could win a war of the future."

Ongoing advances in technology made for an interesting academic year. On September 23rd, just a month after Momyer's Air War College class began, President Truman announced the USSR had detonated an atomic weapon, ending the American nuclear monopoly. The episode sped US efforts to create a thermonuclear bomb and prompted the Atomic Energy Commission (AEC) to recommend, "an intensification of efforts to make atomic weapons available for

<sup>&</sup>lt;sup>2</sup> "Air War College Instruction Circular 50-0: Air War College Curriculum, 1949-1950," 8 August 1949, p. 1-4, 239.01, 1 July – 31 Dec 1949, Appendices 1-10, IRIS No. 00154604, AFHRA.

<sup>&</sup>lt;sup>3</sup> As quoted in Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force*, vol. 1 (Maxwell Air Force Base, Alabama: Air University Press, 1989), 277.

<sup>&</sup>lt;sup>4</sup> As quoted in Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force*, vol. 1 (Maxwell Air Force Base, Alabama: Air University Press, 1989), 278.

tactical purposes."<sup>5</sup> By May of 1950, the AEC received a military requirement for nuclear weapons that could be dropped by high-performance aircraft. The Sandia Corporation began work on miniature nuclear explosive devices that could be contained within delivery devices capable of being carried on fighter aircraft. Tactical nuclear weapons were on the way.<sup>6</sup>

Appropriately, Momyer's thesis, entitled "A Concept of Tactical Air Operations," aimed to describe a version of tactical airpower application "particularly oriented on the new era of atomic weapons." In search of this goal, Momyer briefly analyzed "pre-World War II, World War II, and post-war concepts to determine their applicability, if any, to a future concept." After this analysis, Momyer concluded that the advent of nuclear weapons and the vast numeric superiority of the Soviet armed forces relegated the World War II experience to "the archives of history." This was a strong statement for a man who spent the last three years of his life working on air-ground doctrine.

In exploring future concepts of tactical airpower, Momyer focused on its potential impact in the strategic-atomic offensive. In one of the most insightful observations in his thesis, Momyer stated simply, "Another basic portion of the proposed concept is the treatment of Air Power as an entity, and not as self-contained component parts unrelated. The arbitrary division of Air Power into Strategic and Tactical has tended to compartment the thinking of air strategists so as to compromise an exploitation of the full potential of Air Power as a whole." Momyer was at the leading edge of the development of this theory of indivisible airpower. A prominent air force historian credited General Vandenberg, the Air Force Chief of Staff, with a very similar statement in the summer of 1950.9

In his work, Momyer shifted his definition of tactical airpower from a force which supports the ground campaign to a force which augments the

7

<sup>&</sup>lt;sup>5</sup> Richard Rhodes, *The Making of the Atomic Bomb* (Simon and Schuster, New York, 1986), 767.

<sup>&</sup>lt;sup>6</sup> Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force*, vol. 1 (Maxwell Air Force Base, Alabama: Air University Press, 1989), 285.

<sup>&</sup>lt;sup>7</sup> Colonel William W. Momyer, "A Concept of Tactical Air Operations," Air War College Thesis (Maxwell AFB, AL, 1949), 2 – 24.

<sup>&</sup>lt;sup>8</sup> Momyer, "A Concept of Tactical Air Operations," 25.

<sup>&</sup>lt;sup>9</sup> Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force*, vol. 1 (Maxwell Air Force Base, Alabama: Air University Press, 1989), 381.

strategic forces. Focusing on the threat from the Soviet Union, Momyer believed airpower was the decisive weapon of the next war. He saw ground forces existing only to capitalize on the gains made by airpower in the initial atomic offensive. Because of this, Momyer argued air forces should be accorded "relative wealth compared to the other components, in an era of defense austerity."<sup>10</sup>

After addressing his recommendations for budget shares, Momyer's thesis turned to the platforms and capabilities of tactical airpower. He foresaw tactical forces serving three purposes: "augmentation of the strategic striking force in the exploitation of the initial destruction achieved by that force; support of a limited surface campaign in which the participating surface forces have a defined and limited objective; and support of a major surface campaign between two opposing ground forces." It was only in what Momyer - like many others - believed to be the unlikely event of a major force-on-force ground war that he saw the lessons of World War II applying once again to tactical airpower. In that improbable event, tactical airpower would once again support the ground offensive.

A strategic offensive, Momyer wrote, meant airpower should be "applied in its total conception at the outset of hostilities," and "it should be a basic motive of the air campaign to destroy or neutralize the economic structure of a country almost simultaneously with the outbreak of hostilities." Momyer believed "the dislocation of the internal structure of a country occurring instantaneously creates a condition that is favorable to complete chaos and an attendant probability of capitulation or impotency." In this section of his thesis, Momyer's words again echoed other discussions, including those of the President's Air Policy Commission report, which prioritized a ready and powerful Air Force for massive action at a war's onset, and General Muir Fairchild, the Vice Chief of Staff, who believed a "strategic striking force" must be always poised for an overwhelming punch. <sup>13</sup>

-

<sup>&</sup>lt;sup>10</sup> Momyer, "A Concept of Tactical Air Operations," 25.

<sup>&</sup>lt;sup>11</sup> Momyer, "A Concept of Tactical Air Operations," 26.

<sup>&</sup>lt;sup>12</sup> Momyer, "A Concept of Tactical Air Operations," 27 - 31

<sup>&</sup>lt;sup>13</sup> Futrell, *Ideas*, *Concepts*, *Doctrine*, vol. 1, 287.

Momyer did make a distinctive contribution through his conception of tactical airpower in an atomic conflict. He believed tactical fighters could destroy those systems unsuitable for strategic atomic attack. While the initial strategic atomic attacks focused on Soviet transportation and petroleum production systems, Momyer saw tactical aircraft attacking, "communication centers, transportation facilities, and other diversified target systems necessary to maintain the integrity of the country and the security of its deployed military forces." In a bit of logical inconsistency, Momyer suggested tactical airpower could be used to destroy fielded air forces and isolate enemy ground forces. Only pages before, he said these same concepts were obsolete. 14

Momyer believed fighter aircraft must deploy to the combat zone so that they could strike Soviet targets. Such a deployment required the attack of enemy fielded forces, but this was not airpower in support of the traditional land battle. Only tactical airpower could prevent the overwhelmingly numerically superior Soviet forces from overrunning the forward bases that permitted U.S. aircraft to reach their targets. If the conflict progressed to a battle between surface forces, Momyer felt the tactical and operational lessons of World War II would be valid. He also believed, however, that unlike in World War II, the surface campaign would not be decisive. Instead, the surface forces would only be "exploiting the strategic air offensive and not the primary means of defeating the enemy nation." Nullifying the enemy's superiority in ground forces, airpower would serve to shape the enemy into isolated regions where American ground forces could attack with parity. 15

In this area, Momyer was in lock-step with the Army's own vision of their role in the nuclear world. Bradley's words in the 1948 budget hearings could be heard through Momyer's words on paper. "At the outbreak of an emergency, or before it takes place," Bradley testified, "the Army must be prepared to give protection against bombing, sabotage, and fifth column attacks to the most vital installations, including the atomic energy plants; and it must be able to seize

-

<sup>&</sup>lt;sup>14</sup> Momyer, "A Concept of Tactical Air Operations," 27 - 31; Thomas C. Hone, "Strategic Bombardment Constrained: Korea and Vietnam," in *Case Studies in Strategic Bombardment*, R. Cargill Hall, ed. (Washington, D.C.: Air Force History and Museums Program, 1998), 470; Steven L. Rearden, "U.S. Strategic Bombardment Doctrine since 1945," in *Case Studies in Strategic Bombardment*, 391.

<sup>&</sup>lt;sup>15</sup> Momyer, "A Concept of Tactical Air Operations," 32 – 38.

the overseas areas of vital importance to our communications and to our Air Forces."<sup>16</sup> Perhaps seeing the error of his ways, Momyer no longer held on to the idea that it could be two years from the start of the strategic offensive until tactical air forces and ground forces would come into play. Not only was it unrealistic, but it also provided an opportunity for those in control of the purse strings to seek further cuts in tactical platforms. With Momyer's new concept, the tactical force had to be trained and in place. There was not enough time to rely on the industrial base to rapidly create this force after the onset of hostilities.

In concluding his thesis, Momyer sounded the call for tactical airpower's place in the atomic age. "Science laid the cornerstone of a new military concept," he wrote, "when atomic weapons became a tool at the disposal of the strategist." If his ideas were some distance removed from the experiences of World War II, they did not stray far from the beliefs of Airmen before World War II. The delivery of atomic weapons from the skies further strengthened the power of the air offensive while lessening the role of surface forces.<sup>17</sup>

Why did Momyer work so hard to find a place for tactical air in an increasingly strategic service? As Momyer diligently developed his thesis, there was no indication that austere post-war defense budgets would abate. At the behest of the nation's political leaders, the Air Force had prioritized first, a strong strategic striking force, and second, an air defense force capable of at least blunting an enemy's atomic attack against America. Momyer's thesis, which discounted much of what he had experienced in World War II, was nonetheless an intellectual blueprint to fit tactical airpower into an emerging Air Force structure.

As graduation approached, Momyer learned he would stay on at Maxwell as a member of the Air War College faculty. Shortly after graduation, however, world events brought academic operations at Maxwell to a halt. On July 20, less than a month after the North Koreans crossed the 38th parallel into South Korea, the Air Force Chief of Staff directed the Air War College to suspend

106

<sup>&</sup>lt;sup>16</sup> As quoted in Adrian R. Lewis, *The American Culture of War: The History of U.S. Military Force form World War II to Operation Iraqi Freedom,* (Taylor and Francis Group, New York, 2007), 73.

<sup>&</sup>lt;sup>17</sup> Momyer, "A Concept of Tactical Air Operations," 40.

future classes. Since the next AWC class was scheduled to start on August 22nd, Vandenberg's decision caught a number of students in the middle of the move to Maxwell. All of these students received new orders, and either returned to their home stations or went to new assignments. Since the future of the AWC was unclear, Air Force headquarters ordered all AWC faculty and staff to remain at Maxwell and begin preparation for the potential of a future class. Soon, Air University learned that the next AWC class would begin in January of 1951. While many of his peers fought the Chinese and North Koreans in Asia, Momyer remained at Maxwell preparing for his first AWC class as a faculty member. 18

As Momyer watched the Korean conflict unfold, he may have realized traditional tactical airpower was not, after all, dead. Although there was some consideration and debate around whether or not nuclear weapons should be used in Korea, they were not. A war without nuclear weapons, a limited war, was now a reality. Limited war meant ground forces, and that meant tactical airpower and more money for defense. The Air Force made TAC a major command again in August, and in December, Truman issued Presidential Proclamation 2914. It declared a state of emergency and called upon Americans to be ready to make sacrifices for the journey that lie ahead. By June 1951, to meet the realities of the Korean conflict, Congress had approved a number of budget additions to bring the total defense bill for FY 1951 to over \$49 billion.<sup>19</sup>

Operating in this rapidly changing security environment, Momyer began his time as an instructor in the Plans and Operations Division of the AWC faculty. He facilitated seminars on the national strategies of World War II. Momyer's course focused on three major areas: the impact of interwar activities on the overall strategies pursued in World War II, the decisions made at high level military and political conferences during World War II, and a study of the major campaigns.<sup>20</sup> "Every pilot knew," Momyer later wrote, "that our strategy

<sup>&</sup>lt;sup>18</sup> "Air University History: 1 July 1950 – 31 December 1950," vol. 1, p. 167 – 169, K239.01 v. 1, IRIS No. 0479038, AFHRA.

<sup>&</sup>lt;sup>19</sup> S. Nelson Drew, ed., *NSC-68: Forging the Strategy of Containment* (National Defense University, Washington, D.C., 1994), 1-19.

<sup>&</sup>lt;sup>20</sup> "Air University History: 1 January 1951 – 30 June 1951," vol. 2, Personnel Rosters, p. 2, K239.01 Jan – June 1951, v. 2, IRIS No. 0479043, AFHRA; AWC Instruction Circular

embraced two fundamental features: attacks against the enemy heartland . . . and participation with surface forces to destroy the opposing forces or cause them to surrender."<sup>21</sup> These themes could be found throughout his instruction.

In June 1951, Momyer left his teaching job and became the director of the Evaluation Staff of the Air War College. He found a great deal of familiarity in the legacy of the organization. After the AAF Board had disbanded in 1946, the brand new Air University had garnered a number of the board's former missions, including the development of both doctrine and the lessons learned in combat operations. Always in search of better ways to describe the functions of organizations, the Air University changed the name to the Evaluation Division in the fall of 1947. This name change signified the organization was responsible for evaluating Air Force policies, doctrines, and equipment, rather than serving a pure research function. In early 1950, the Deputy Commanding General of Air University, Major General John DeForest Barker, "proposed that the commander of the Air University be authorized to approve and publish operational Air Force manuals under an authority from the chief of staff." Barker, who served as Secretary of the Air Corps Tactical School from 1930-1934, was a driving force behind airpower thought at Air University during Momyer's tenure. Although the Deputy Chief of Staff for Operations at the headquarters in Washington, D.C. retained approval authority, the responsibility for creating doctrine fell upon the Evaluation Division of the Air University Staff. In October of 1950 the Evaluation Division moved to the Air War College.<sup>22</sup>

By mid-1951, Momyer's Evaluation Staff was responsible for approximately twenty-five projects. Momyer led three divisions which handled this work: the Planning and Employment Division, the Doctrine and Policy Division, and the Technical Division. The projects ranged from an Air Aggressor Manual to the Tactical Employment of Atomic Weapons. Most interesting in the context of airpower thought, however, was the twelve volume project to write Air

Number 51A-2, "Study No. 2: National Strategies in Action During World War II," in "Air University History: 1 January 1951 – 30 June 1951," vol. 3, K239.01 V.3, Jan – June 51, IRIS No. 0479044, AFHRA; "Air University History: 1 January 1951 – 30 June 1951," vol. 1, p. 137, K239.01, Jan – June 1951 v. 1, IRIS No. 0479042, AFHRA. <sup>21</sup> Air Power in Three Wars, 1.

<sup>&</sup>lt;sup>22</sup> Futrell, *Ideas*, *Concepts*, *Doctrine*, vol. 1, 209-211, 380.

Force doctrine manuals for major mission areas. This effort, officially launched in August 1951, covered the areas of theater air operations, counter air force operations, interdiction operations, air cargo and re-supply operations, liaison and air evacuation operations, air defense operations, air transport operations, airborne operations, strategic air operations, close combat air support, theater reconnaissance, and a basic air force manual. As Director of the Evaluation Staff, Momyer supervised the completion of all of these manuals. He also served as the project officer for the basic document, Air Force Manual 1-2. Because this manual was to form the foundation of the rest of the doctrine documents, it received the highest priority.<sup>23</sup>

By the time Momyer took control, the joint doctrine efforts in Washington had progressed enough to provide a foundation on which to build Air Force doctrine. At that time, Barker and ten other AU officers produced a version of a basic doctrine manual for the headquarters to review. In October 1951, Barker officially assigned responsibility for the completion of the manual to Momyer's staff. In his efforts to complete the project, Momyer took inputs from all of the major commands and the Air Staff. Beginning in February 1952, Momyer led a committee of four officers that thoroughly rewrote the existing document. He then forwarded the completed document to Lieutenant General Idwal Edwards, Kenney's replacement as the Commander of Air University, Barker, his deputy, and Dr. Albert F. Simpson of the Air University Research Studies Institute. These three individuals again rewrote the document and forwarded it to the Air Force's headquarters for approval. After nearly a year of further coordination and minor modifications, the document was approved, and published as AFM 1-2 in April 1953.<sup>24</sup>

<sup>&</sup>lt;sup>23</sup> "Air University History: 1 July 1951 – 31 December 1951," vol. 1, p. 29-33, K239.01 Jul – Dec 1951, v. 1, IRIS No. 0479047, AFHRA; "Classified Annex to AWC History, Jul – Dec 1951," p. 1-7, K239.01 Jul-Dec 1951 v. 1, Pt. 2, IRIS No. 00917436, AFHRA.; "History of Air War College: 1 Jul 1952 – 30 Jun 1953," vol. 1, p. 39-44, K239.07B, Jul 1952 – Jun 1953, IRIS No. 0480916, AFHRA.

<sup>&</sup>lt;sup>24</sup> Major General John DeF. Barker, Deputy Commanding General, Air University, to Lieutenant General T.D. White, Deputy Chief of Staff, Operations, Headquarters, United States Air Force, letter, 27 March 1953, K239.1616-11, IRIS No. 0481374, AFHRA; Futrell, *Ideas, Concepts, Doctrine*, vol. 1, 378-389; "Air University Special Studies Progress Report" vol. 1, 1 April 1952, p. 11, K239.04, IRIS No. 0479369, AFHRA; "History of Air War College: 1 Jul 1952 – 30 Jun 1953," vol. 1, 40; Futrell offers an excellent account of the complete process of approval for AFM 1-2.

Titled *United States Air Force Basic Doctrine*, AFM 1-2 presented the basic doctrine of the Air Force in a short seventeen pages. These pages were split into five sections: military force as an instrument of national policy, the relationship of military forces, air forces and the principles of war, employment of air forces, and air power and national security. Characteristic of airpower thought at the time, the document cited the dominant role of air forces in war. More importantly, AFM 1-2 presented the word for how things were to be done in the Air Force. This how-to of basic doctrine emerged from what the foreword to the document called "experience gained in war and from analysis of the continuing impact of new weapons on warfare."<sup>25</sup>

In chairing the latter stages of the production of AFM 1-2, Momyer successfully produced the first sanctioned basic doctrine document for the independent U.S. Air Force, a significant achievement. Nearly simultaneous with the publication of AFM 1-2, Momyer forwarded an additional four operational doctrine manuals to the Air Staff for approval. These were the manuals for Theater Air Operations, Air Defense Operations, Air Transport Operations, and Strategic Air Operations. The manual on Theater Air Operations proved to be most relevant to Momyer's experience and to his future position as Seventh Air Force Commander during the Vietnam War. This document sought to provide, "principles for the conduct of air warfare in a theater of operations and for the command and control of air forces." It was a basic guide for "correlating and coordinating the operations of Air Force forces with other forces in the theater."<sup>26</sup>

The concept of 'theater air forces' represented a relatively new stage in the evolution of airpower thought. Although Momyer had not used the term, he certainly referred to the concept in his AWC thesis when he discussed the arbitrary division of airpower into strategic and tactical. In the fall of 1950, Barker co-authored an article with Colonel Dale O. Smith entitled "Air Power Indivisible." In this article, the authors stated, "The overwhelming advantage of flexibility provided by air power has sometimes been mitigated by an

<sup>&</sup>lt;sup>25</sup> Colonel Royal H. Roussel, "The Air Force Doctrinal Manuals," *The United States Air Force Air University Quarterly Review* 7, No. 1 (Spring 1954): 126-131.

<sup>&</sup>lt;sup>26</sup> "History of Air War College: 1 Jul 1952 – 30 Jun 1953," vol. 1, 41; Rousell, "The Air Force Doctrine Manuals," 130.

unfunctional organization which seems to divide available air strength into small parcels, each parcel tightly wrapped and labeled 'For tactical (or other) use only." Yet, "the actual employment of air forces in World War II and in the present Korean conflict should dispel any fears that Air Force policy tends toward compartmentation." Smith and Barker then went on to describe the use of "strategic" forces against "tactical" targets, "tactical" forces against "strategic" targets, and "air defense" forces against both targets. <sup>27</sup>

In blurring the lines between tactical and strategic air forces, Barker not only hoped to optimize the use of airpower but also to assuage Army fears that they may suffer in the amount of tactical air support simply because there were not large forces set up under the term "Tactical Air Force." Later, in a letter to Secretary of the Air Force Thomas K. Finletter, Barker outlined the Air University concept of air operations. Under this concept, Barker defined the theater air forces as "those which are assigned to a theater to conduct air operations required by the theater mission." In 1953, Barker again found himself clarifying the concept of theater air forces, when General Vandenberg opposed use of the terms 'theater role' and 'theater aviation' in AU courses. Barker enlisted Momyer's help and expertise in preparing his response to the chief of staff. Momyer wrote Barker:

In my opinion there is no conflict between the terms 'tactical' and 'theater.' Theater air forces are comprised of all air units assigned to a given theater of operation. Normally, the forces so assigned by the USAF comprise tactical forces, which are forces specifically trained and organized to function in concert with surface forces. Tactical forces, per se, do not in themselves constitute the whole of theater air forces. This is true because naval air forces whether carrier based or land based when placed under the jurisdiction of the theater commander are further assigned to the theater air commander, and as such become an organic part of theater air forces. <sup>28</sup>

As it related to the war in Korea, Momyer believed the "theater air forces in the Far East Air Command comprise the 5th AF (Tactical), the Air Defense

-

 <sup>&</sup>lt;sup>27</sup> Colonel Dale O. Smith and Major General John DeF. Barker, "Air Power Indivisible," *The United States Air Force Air University Quarterly Review*, Fall 1950, 4-18.
 <sup>28</sup> Major General John DeF. Barker, Deputy Commanding General, Air University, to Lieutenant General Idwal H. Edwards, Deputy Chief of Staff, Operations, Headquarters, United States Air Force, Letter, 11 January 1951, K239.1616-17, IRIS No. 0481380, AFHRA.

Command of Japan, Naval Carrier based air, and Marine air. It is the sum of these forces that provide us with the term theater air forces since some are tactical in nature and others are classified differently. It is this total force that gives meaning to the term theater air force not the types of equipment operated, i.e., light bomber, heavy bomber, etc."<sup>29</sup>

However clear Momyer was on the idea of theater airpower, he recognized the power of organizational dynamics. "To make our proposal more digestible," he wrote, "I would suggest . . . we eliminate any specific reference to SAC forces." Momyer believed references to, "SAC forces as being a part of theater air forces, even on a loan arrangement is like waving a red flag to many people in the Air Staff, and General LeMay in particular." Momyer thought deleting a reference to SAC was wise, and "we won't lose anything by its deletion since in fact it will be placed under the jurisdiction of the theater commander, operational control, when the situation dictates such action." Almost 13 years later, Momyer experienced first-hand how difficult it was to include SAC in a theater airpower arrangement, even when the situation seemed to call for it. This was one of the first indications that the Air Force may have difficulties within its own ranks when it came to adherence to the centralized control of air. It is testimony to Momyer's credibility and influence at Air University that Barker's final reply to the chief of staff incorporated all of his suggestions. 30

This idea of airpower in a theater of war was central to one of Momyer's most fundamental beliefs. As much as he liked to write about forgetting World War II lessons while he was at AWC, he saw near-perfection in the theater-wide

<sup>&</sup>lt;sup>29</sup> Major General John DeF. Barker, Deputy Commanding General, Air University, to Lieutenant General Idwal H. Edwards, Deputy Chief of Staff, Operations, Headquarters, United States Air Force, Letter, 11 January 1951, K239.1616-17, IRIS No. 0481380, AFHRA; Major General John DeF. Barker, Deputy Commanding General, Air University, to Mr. Thomas K. Finletter, Secretary of the Air Force, Letter, 1 June 1951, K239.1616-17, IRIS No. 0481380, AFHRA; Major General John DeF. Barker, Deputy Commanding General, Air University, to General Hoyt S. Vandenberg, Chief of Staff, United States Air Force, Memorandum, 2 July 1952, K239.1616-17, IRIS No. 0481380, AFHRA.
<sup>30</sup> Major General John DeF. Barker, Deputy Commanding General, Air University, to General Hoyt S. Vandenberg, Chief of Staff, United States Air Force, Draft Letter, 24 June 1952; Colonel William Momyer, Director, Evaluation Staff, Air War College, to Major General DeF. Barker, Deputy Commanding General, Air University, Letter, 26 June 1952; Major General John DeF. Barker, Deputy Commanding General, Air University, to General Hoyt S. Vandenberg, Chief of Staff, United States Air Force, Memorandum, 2 July 1952, K237.1616-17, 1951-1953, IRIS No. 0481380, AFHRA.

structure of command and control in Tedder's Mediterranean Air Force. "From this campaign," Momyer later wrote, "airmen derived basic concepts about how best to organize all forces and to employ Airpower within a theater of operations." Momyer specifically mentioned the naval component commander's attempt to maintain control of a portion of the air resources to protect the naval component. "However," Momyer wrote, "Tedder refused to parcel his Airpower to the operational control of the Royal Navy. He said that because of conflicting demands for his Airpower, he had to employ it from task to task as the nature and intensity of the threat required."<sup>31</sup>

In contrast, Momyer saw ineffective command arrangements in the Korean conflict. While Eisenhower designated commanders for each component in the Mediterranean, MacArthur did not in Korea. He did have a Far East Air Force (FEAF) and a Naval Forces Far East (NAVFE), but he did not designate a subordinate land component commander. He effectively served as his own Commander of Army Forces Far East through October 1952. "There was continuing difficulty with the Far East Command structure," Momyer later wrote, "because of MacArthur's failure to establish an army component command." Since MacArthur served as both the joint force and ground force commander, his headquarters had a great deal more Army representation than any other service. Momyer believed this factor caused the Far East Command staff to get into problems which could have been resolved at the component level.

Always a man of doctrine, Momyer felt MacArthur's organization was dysfunctional because it had strayed from Joint Doctrine. "A commander of a unified command," read Joint Action Armed Forces, "shall have a joint staff with appropriate members from each Service component under his command in key positions of responsibility," and, "the commander of a unified command does not exercise direct command of any of the Service components or of a subordinate force."<sup>32</sup>.

The control of airpower in Korea also fell short of Momyer's approval. The Commander of FEAF, General George Stratemeyer, asked MacArthur for

-

<sup>&</sup>lt;sup>31</sup> Airpower in Three Wars, 49.

<sup>&</sup>lt;sup>32</sup> FM 110-5/JAAF/AFM 1-1, 19 September 1951, 30.

operational control of all aircraft operating in Korea. Although MacArthur granted this control for all aircraft executing the FEAF mission, he gave NAVFE control of all aircraft in support of their own component mission. To further complicate things, MacArthur said when both NAVFE and FEAF were assigned missions in Korea, FEAF had coordination control, a notion rife with murky boundaries between the two services. This caused a great deal of consternation for Momyer. "Weren't the air resources of NAVFE, when committed for strikes in either North or South Korea," he later wrote, "operating in an area of responsibility already established as the prerogative of the air component commander?" Momyer also wondered, "And what did the term coordination control mean?"33 He knew the definition existed in Joint Doctrine, but it was vague: "A Coordinating Authority has the authority to require consultation between the agencies involved but does not have the authority to compel agreement." In the case of a disagreement, the coordinating authority "should attempt to obtain agreement by discussion." If that did not work, "he shall refer the matter to the appointing authority."34 Ambiguity did not sit well with Momyer.

While deeply immersed in the production of Air Force doctrine and its implications in Korea, Momyer also served as a liaison to a number of Air Force and Joint committees. One such committee was the Ad Hoc Committee on Air Force Doctrine in the Employment of Tactical Aviation. Significantly, if subtly, the name of the committee was quickly changed to the Ad Hoc Committee on the Tactical Employment of Air Power. This change reflected ongoing Air Force efforts to ensure that tactical airpower was not viewed as a separate force. The impetus for the formation of the committee came from a push by some in the Army to take back a degree of control over tactical aviation. In September of 1951, General Mark W. Clark, Chief of Army Field Forces, wrote:

I consider that the traditional Air Force doctrine, which provides for co-equal command status between ground and air at all but theater levels, constitutes a fundamental defect in command relationship. This doctrine of command by mutual cooperation is unacceptable because it reserves to the supporting arm the authority to determine whether or not a supporting task should be

<sup>33</sup> Airpower in Three Wars, 65.

<sup>&</sup>lt;sup>34</sup> FM 110-5/JAAF/AFM 1-1, 19 September 1951, 37.

executed. The theory of divided command in the face of the enemy is foreign to the basic concept of warfare wherein the responsible commander exercises undisputed directive authority over all elements essential to the accomplishment of his missions. The provision for a decision only at the theater or unified command level deprives the Army Commander of this authority and in the case of a conflict of opinion between two co-equal commanders precludes resolution within an acceptable time limit.<sup>35</sup>

Ironically, it was difficult to imagine another senior Army leader who knew better the power of centralized control. Clark reaped the benefits of that arrangement when it helped the Fifth Army stay ashore at Salerno in 1943. General James Van Fleet, the Eighth Army Commander in Korea, even told General Frank F. Everest, Commander of Fifth Air Force, a squadron of fighter bomber aircraft should be assigned to each Army Corps. In addition to a push from the Army, several members of Congress were considering the possibility of investigating Air Force tactical support for Army units. Much of this controversy stemmed from the belief that Marine close air support in Korea was more effective than Air Force support. W. Barton Leach, a Harvard Law School professor who was also a reserve colonel and former chief of the Operations Analysis Division of the Air Staff during World War II, warned that, "the general trend of press comment is that, while the USAF has done a good job in Korea, Marine close support has been much better; and the conclusion is usually drawn that the 'Marine System' should be made available to the Army." The Vice Chief of Staff, General Nathan F. Twining, formed the Ad Hoc Committee to "collect and assemble pertinent data, and prepare the Air Force case."36

Throughout early 1952, Momyer attended conferences and meetings of the Ad Hoc Committee. Momyer and the other members of the committee also traveled to various commands and bases to collect information and organize the Air Force's position. On March 25, 1952, Momyer joined committee colleagues

<sup>&</sup>lt;sup>35</sup> General Mark W. Clark, Chief of Army Field Forces, to Chief of Staff, Department of the Army, Letter, 13 September 1951, Policy File: Ad Hoc Committee for TacAir, K168.15-43, IRIS No. 0472907, AFHRA.

<sup>&</sup>lt;sup>36</sup> Allan R. Millett, "Korea, 1950-53," in Benjamin Franklin Cooling, ed. *Case Studies in the Development of Close Air Support* (Washington, D.C.: Center for Air Force History, 1994), 367-383; Deputy for Plans, Deputy Chief of Staff for Operations, Headquarters USAF, Investigation of Tactical Doctrine, staff study, 15 November 1951, Policy File: Ad Hoc Committee for TacAir; General Frank Everest, Commander, Fifth Air Force, Memorandum for Record on conversation with General James Van Fleet, 17 December 1951, Policy File: Ad Hoc Committee for TacAir.

for a meeting at Langley Air Force Base with the TAC Commander, General Joe Cannon. Back in familiar haunts at TAC Headquarters, Momyer once again worked out doctrinal details regarding the employment of airpower in meetings with the TAC staff. Later that year, Momyer crafted "a wording of the Air Force position on each item (of controversy in the area of airpower in a tactical role) as the Air University recommended." As the committee's work continued, Momyer spent a great deal of time further studying the controversial aspects of the control and application of airpower in Korea.<sup>37</sup> For Momyer, all signs pointed to a central tenet. "The fundamental point," he wrote later, "was that the theater air component commander had to control all the Airpower in the theater so that he could support ground, naval, or air operations – wherever the enemy was weak."<sup>38</sup> Probably for some years before this point—and forever afterward—this was a hallmark of Momyer's thinking regarding airpower.

Momyer completed his tour at Maxwell Air Force Base in August of 1953. In his more than three years of service at Air University, he left an indelible mark on the canvas of airpower thought. As he arrived in Washington, D.C. for another year of senior service school at the National War College, the Air Force distributed approved copies of AFM 1-3, Theater Air Operations; AFM 1-4, Air Defense Operations; and AFM 1-5, Air Operations in Conjunction with Amphibious Operations. AFM 1-8, Strategic Air Operations, followed in early 1954. While published after his departure, the manuals were created under Momyer's direction. The Air Force had finally created a basic set of doctrinal manuals - the first as a service independent of the Army. During his years on the Air War College Evaluation Staff, Momyer found himself in the center of some of the fiercest debates on the application and control of airpower. Momyer entered the halls of the National War College as one of the most knowledgeable officers in the Air Force on the subject of airpower doctrine and as a strong believer in the flexibility, versatility, and lethality of airpower under the central control of a theater commander.

<sup>&</sup>lt;sup>37</sup> Colonel Ethelred L. Sykes, Memorandum for Record on HQ TAC Visit, 27 March 1952, Daily Journal: Ad Hoc Committee; Colonel Ethelred L. Sykes, to Colonel William W. Momyer, Letter, 1 April 1952, Ad Hoc Committee Chronological File (Outgoing), K168.15-43, 1949-51, vol. 4, AFHRA.

<sup>&</sup>lt;sup>38</sup> Airpower in Three Wars,

Upon leaving Alabama, the Momyer's traded the nice, slow pace of Montgomery for the hustle of Washington, D.C. Much of the credit for the idea of a National War College belonged to General Arnold, who, as legend had it, was "impressed with the ignorance of his own air officers of land and sea warfare," and, "reasoned that if his officers were so ill-informed about the other Services, then no doubt Army and Navy officers were equally ill-informed of the nature of air warfare." During Momyer's academic year, National was led by Lieutenant General Howard A. Craig, Momyer's former supervisor as the commander of XII ASC. Craig set the philosophy for the school. He believed the best preparation for the students was "an increased capacity to think broadly, objectively and soundly along lines with which they will come in future contact – lines which have to do with national security in this exceedingly complex world in which we live."

National had a deliberate educational method. First, there were no teachers or instructors, only facilitators. "An individual," explained the yearbook, "gets no more out of his course of study than he is willing to put into it." Second, there were no approved school solutions. Freedom of thought was essential to the experience. Third, cohesiveness amongst the student body was essential to make the most out of the learning environment. To further this goal, the students were directed to wear civilian clothes, use each other's first names, and participate in a number of social and recreational activities.<sup>41</sup>

On Momyer's first day, the faculty described the structure of each day that lie ahead. Every day had a topic. These daily topics were smaller building blocks for the broad field to be covered during that sequence of study. For example, for the first fourteen days, Momyer studied 'The National State System and the Basic Elements of a Nation's Power.' Daily topics included 'The International Scene,' 'Basic Elements of a Nation's Power,' and other important and relevant topics. Preparation for the discussion in the subject matter of the day required approximately two hours of reading.<sup>42</sup>

-

<sup>&</sup>lt;sup>39</sup> Yearbook, The National War College, Ninth Session 1954-55, 2.

<sup>&</sup>lt;sup>40</sup> Yearbook, The National War College, Ninth Session 1954-55, 8.

<sup>&</sup>lt;sup>41</sup> Yearbook, The National War College, Ninth Session 1954-55, 16.

<sup>&</sup>lt;sup>42</sup> Yearbook, The National War College, Ninth Session 1954-55, 17; "A Nine-Year Record of the Courses of the National War College," 1953-54, 64.

Each daily topic also involved a mass lecture for the student body. Typically starting at nine a.m. and lasting about fifty minutes, each lecture period also provided an opportunity for thirty minutes of question and answer. The lecturer of the day then spent time with an alternating group of about twenty-five students further discussing the topic of the day. Following this discussion, the lecturer then had lunch with yet another group of students. One of the qualities which made the National experience so valuable was the quality of the speakers that Momyer saw during his time there. Dr. Bernard Brodie spoke on 'Atomic Energy and National Power,' the Secretary of State, John Foster Dulles, spoke on 'Main Lines of Current U.S. Military Strategy,' and General Curtis E. LeMay, Commander of Strategic Air Command, spoke on 'The Problem of Attacking the Enemy's War-Making Capacity.'43

Those students not in group time with the speaker went to small group discussions of about twelve students per group. These groups changed out every two weeks. There were numerous learning opportunities in these discussion groups - the practice of making good arguments, the exchange of ideas, getting to know fellow students, and the stimulation of thought on topics of national security.<sup>44</sup>

Yet another aspect of the learning at National was something Momyer found very familiar – the committee problem. Each course lasted approximately twenty days. During those twenty days, the faculty divided the class into committees of six to eight men. For the duration of the course, the committees met to solve policy problems assigned by the faculty. Many of the assigned policy problems mirrored those under consideration within the government. At the end of every course, each committee produced a four thousand word written solution. Selected committees presented their solutions in front of all students in the school auditorium.<sup>45</sup>

The last formal part of the education at National matched Air War College. Although most work at the school was done in groups, Momyer had to complete an individual study on par with a thesis for a Master's Degree. At

118

<sup>&</sup>lt;sup>43</sup> Yearbook, The National War College, Ninth Session 1954-55, 17; "A Nine-Year Record of the Courses of the National War College," 1953-54, 65-93.

<sup>&</sup>lt;sup>44</sup> Yearbook, The National War College, Ninth Session 1954-55, 18.

<sup>&</sup>lt;sup>45</sup> Yearbook, The National War College, Ninth Session 1954-55, 19.

some point during the school year, he also had to give a talk on his project in front of a group containing no less than half of the student body of the school.<sup>46</sup>

Not surprisingly, Momyer chose to write about airpower for his student study. Titled, "Strategic Considerations in the Development of a NATO Air Strategy," Momyer used historical examples from World War II and Korea to detail items he believed were important for success in NATO operations. His chapter subjects did not stray from his, by now, well developed airpower framework. In chapter order, he described the problems of coalition command, detailed a gameplan to attain unity of command, outlined the criticality of command structures for military strategy, emphasized the importance of air superiority, and defined the impact of aerial interdiction. Momyer's intent, was to "indicate the interrelationship of command, air superiority, and interdiction in the conduct of air warfare."

A true believer in the importance of unity of command, Momyer wrote, "military readiness is not only dependent upon the character and capability of military forces to conduct operations, but also upon a proper command structure that is effectively conceived and designed to exploit the capacities of the forces." He used World War II to describe his perception of an optimum command arrangement and paid particular attention to the conflict generated by the different leadership perspectives of Roosevelt and Churchill. "It has been a general procedure in this country," he wrote, "for the President as Commander-in-Chief in time of war to establish policy and guidance to the military for the conduct of the war and to interfere only when he believed necessary." Further, Roosevelt "relied upon the military to carry out the task without direct participation upon his part as to the methods by which the task was to be accomplished." Momyer described the British philosophy as, "direct control of the military activities in the various Theaters of Operations since military actions could not be divorced from their political consequences."48 Although Momyer's intent was only to describe the different perspectives each

<sup>46</sup> Yearbook, The National War College, Ninth Session 1954-55, 20.

<sup>&</sup>lt;sup>47</sup> Colonel William W. Momyer, "Strategic Considerations in the Development of a NATO Air Strategy," ii.

<sup>&</sup>lt;sup>48</sup> Colonel William W. Momyer, "Strategic Considerations in the Development of a NATO Air Strategy," 1-5.

nation brought to the table, his phrasing belied a firm belief the politicians should declare wars and let the military leaders fight them.

Momyer then specifically addressed command of airpower. Never straying far from his World War II roots, Momyer lauded Eisenhower's Mediterranean command arrangement with "single air, ground, and sea commanders responsible for the operations of those forces and directly responsible to him." Momyer believed Air Marshal Tedder's air component command of all units in the Mediterranean was "consistent with the mobility of Air Forces which cannot be realistically restrained to geographical boundaries as Armies and Navies." Momyer then applied this optimum structure to measure the potential for success in Western Europe. Because the current Supreme Headquarters Allied Powers, Europe (SHAPE) consisted of three subordinate theaters in central, southern, and northern Europe, Momyer believed the "grand strategy is a compartmented strategy of three theaters" and airpower, "under these circumstances takes on the same geographical limitations of Armies and Navies which World War II demonstrated to be a fallacious concept." In concluding his thoughts on command, Momyer then boldly stated, "the future of collective security is in peril unless it is recognized that air power must be freed of man-made restrictions if it is to provide security to surface forces deployed to stop aggression."49

Next, Momyer moved on to an analysis of air superiority. In setting the stage, Momyer wrote, "air superiority has real meaning to the American forces that fought the first year and a half of the war, for it rested with the enemy and the effects were in daily evidence." Yet just a few short years later, Momyer continued, the country found itself in the "unfortunate condition in which air superiority has become a cliché and superficially disposed of as all clichés are in time."<sup>50</sup>

Momyer then composed a symphony on air superiority in a single paragraph. For his opening sonata, Momyer wrote, "air superiority is not an end in itself, but only a means to an end . . . once it has been gained and

<sup>&</sup>lt;sup>49</sup> Colonel William W. Momyer, "Strategic Considerations in the Development of a NATO Air Strategy," 9-10.

<sup>&</sup>lt;sup>50</sup> Colonel William W. Momyer, "Strategic Considerations in the Development of a NATO Air Strategy," 11.

vigorously retained, the end or final objective becomes capable of achievement."51 In the next movement, Momyer slowed and explained the costs of a lack of air superiority. "Without air superiority the cost of the objective in precious lives and human resources is excessive." The "price of air superiority may seem awfully high in terms of national resources, but the alternatives are even worse in view of technological developments."52 He then launched into some of his strongest statements. "It appears that air superiority cannot be the responsibility of any single element of an air force, but the responsibility of the whole of an air force." Further, "air superiority is air warfare, and air warfare embodies all the elements and tools of an air force."53 Momyer's finale was dramatic and triumphant. "Perceptions of air warfare as a series of unrelated actions, is to distort the inter-relationship and interdependence of the parts of an air force upon the other." And most dramatically, "to fail in one category of air warfare, is to fail in all categories."54 Clearly, Momyer believed in the importance of air superiority. His belief, however, was contradictory in nature. His description began with air superiority as a means to an end, but ended with air superiority as an end in itself. This inversion, shared by many other Airmen, would not always serve the Air Force well in the decades to come.

Momyer believed Germany's fundamental failure to grasp the importance of air superiority in World War II contributed to their defeat. The Allies, on the other hand, prioritized the attainment of air superiority. Here, Momyer revealed a belief which drove him in future endeavors and decisions. "A theater air force must be conceived and designed from the outset to fight and win the counter air struggle," he wrote. The German air force, Momyer believed, was "convinced that the advancement of the army in battle was the supreme requirement of an air force." Momyer derisively called this the 'Stuka' philosophy of airpower. A proper air force, however, would have as its focus the "gaining air superiority,"

<sup>&</sup>lt;sup>51</sup> Colonel William W. Momyer, "Strategic Considerations in the Development of a NATO Air Strategy," 12.

<sup>&</sup>lt;sup>52</sup> Colonel William W. Momyer, "Strategic Considerations in the Development of a NATO Air Strategy," 12.

<sup>&</sup>lt;sup>53</sup> Colonel William W. Momyer, "Strategic Considerations in the Development of a NATO Air Strategy," 12.

<sup>&</sup>lt;sup>54</sup> Colonel William W. Momyer, "Strategic Considerations in the Development of a NATO Air Strategy," 12.

which would do more to guarantee the security of surface forces than any amount of interdiction or close air support."55

While Momyer's words on air superiority reveal the passion of an Airman who fought without it and lived, his thoughts on interdiction expose the beliefs of a studied pragmatist. "The basis of any interdiction program," he wrote, "must start with the production centers and progressively spread through the arteries which feed the forces outside of the homeland." He saw three interrelated actions supporting an interdiction campaign, "actions to destroy and neutralize the production sources in the homeland; actions to destroy the distribution systems within the homeland; and, actions to neutralize the system and facilities in the various theaters of operations where military forces are engaged." Momyer explained a subtlety often ignored when judging the success of an interdiction campaign. The overall effect on the enemy's fighting capability depended upon the pace of the enemy operation. If the operation required every bit of the production and logistics capability of the nation, an interdiction campaign would have immediate and visible effects. Likewise, if there were large amounts of pre-stocked supplies or the military operations required only a small portion of the productive capacity of the enemy, the results of an interdiction campaign may be more subtle.<sup>56</sup>

Momyer therefore saw interdiction as a chain composed of three links: destroy the means of production, compel the enemy to consume pre-stocked logistics at an accelerated rate, and prevent the movement and distribution of logistics. "The desired aim of the theater interdiction campaign," he wrote, "should be to progressively compel the enemy to employ less efficient means within the logistical system until the point is reached where minimum requirements cannot be met." In illustrating this point, Momyer described his logic. "Thus, attacks against a railroad system are designed to reduce the volume and orderly movement of material and supplies to a less efficient road system," he wrote. Then, the enemy's supply "volume is appreciably reduced and time schedules become uncertain." More road travel meant more reliance

<sup>&</sup>lt;sup>55</sup> Colonel William W. Momyer, "Strategic Considerations in the Development of a NATO Air Strategy," 12-13.

<sup>&</sup>lt;sup>56</sup> Colonel William W. Momyer, "Strategic Considerations in the Development of a NATO Air Strategy," 23-24.

on oil for the transport of supplies, lessening the availability for combat operations. A concurrent attack against fuel supplies further restricted the availability. "As is readily apparent," Momyer wrote, "a vicious cycle is created in which the logistical system must use priceless fuel to supply combat forces and in the process it is using the fuel needed by the combat forces." <sup>57</sup>

In concluding his thoughts on interdiction, Momyer ventured into the realm of Douhet and airpower triumphant. Speaking of the contribution of an interdiction campaign, he wrote, "the defeat and annihilation of the enemy on the field of battle is no longer the primary objective of military operations." Instead, he believed surface combat had become an enabler for the air campaign.<sup>58</sup> This concept likely garnered some enthusiastic responses from his sister service classmates during his paper presentation.

Momyer's choice of a paper topic and the emotion with which he attacked the subject were indicative of the serious nature of a professional who spent the last ten years immersed in the study of airpower application and doctrine. His concepts were strong and his words stronger. His vision for airpower throughout his academic years captured the complexities and interplay of nuclear war with the fundamentals of theater airpower. While he wavered slightly in the orchestration of the campaign, his adherence to the core tactical missions of air superiority, interdiction, and close air support illustrated the intellectual foundations of a man deeply affected by his time in North Africa and his subsequent studies of other campaigns that followed.

Over the course of over two hundred academic days, Momyer became fully immersed in the study of national security. The first semester consisted of sixty-four lectures and covered the political, economic, and social factors of national security. In the second semester, Momyer learned about the application of integrated military force, the construction of strategy, and the development of a national security policy. After listening to seventy lectures in

<sup>58</sup> Colonel William W. Momyer, "Strategic Considerations in the Development of a NATO Air Strategy," 28.

<sup>&</sup>lt;sup>57</sup> Colonel William W. Momyer, "Strategic Considerations in the Development of a NATO Air Strategy," 26.

the second semester, Momyer felt ready to move back into the world he knew so well.<sup>59</sup>

For nearly eight years, the Momyer's enjoyed the opportunity to be together as a family. They cherished every moment. In Momyer's profession, they all knew the next call could come any day. As Momyer rounded out his academic year at National, he received orders to Korea. Although a cease fire in Korea had stopped the conflict in July of 1953, the Korean peninsula was far from peaceful. Momyer eyed the far away land with the mixed emotions of a family man who cared deeply about those he loved and a warrior who relished the opportunity to answer his nation's call. Once again, he said goodbye to Jean and Pat. He was on his way to command in 'The Land of the Morning Calm.'

<sup>&</sup>lt;sup>59</sup> "A Nine-Year Record of the Courses of the National War College," 1953-54, 65-96.

## Chapter 7

## Command and Staff

While the life of intellectual pursuits sharpened Momyer's mind, he was undoubtedly ready to return to the operational Air Force. In the twelve years before he took command in Vietnam, Momyer sped through operational commands, made a return trip to TAC, held an important staff job on the Air Staff, and commanded the Air Training Command. Through these assignments Momyer not only once again led Airmen, but he also travelled through an uncertain nuclear age with the Air Force. Air Force leaders have often been criticized for a focus on strategic bombardment in the years between the Korean and Vietnam wars. But those were years fraught with risk management. Momyer and Airmen of his generation strived mightily to align limited budgets and austere resources to the threat their civilian superiors identified as the greatest danger, a nuclear war with the USSR. In this, they followed the lead of political leaders as they prepared for World War III, which was, after all, the one war that could drastically alter the American way of life.

On August 4, 1954, Momyer took command of the 8th Fighter Bomber Wing at Suwon Air Base, South Korea, a job he held for a mere six months before fleeting up to command the 314th Air Division at Osan Air Base.¹ When Momyer arrived, the 314th Air Division had recently assumed the responsibilities of the Advance Headquarters of the Fifth Air Force. Since the arrival of the Fifth Air Force Advance Headquarters in 1953, Osan had served as the center for control of American airpower in Korea. After the armistice which had abated the Korean War, operations slowly wound down and the division took over the control functions at Osan. Consequently, Momyer gained operational control of all Fifth Air Force units in Korea. In addition to this responsibility, Momyer also had operational control over shore-based Naval and Marine fighter in air defense or offensive roles, operational control over Naval and Marine anti-aircraft artillery units in support of air defense, and supervision of an Air Defense Control Center. In this role, Momyer was ultimately responsible for the airpower assets required for the enforcement of

<sup>&</sup>lt;sup>1</sup> "History of the 8th Fighter Bomber Wing: 1 Jul 1954 - 31 Dec 1954," K-WG-8-HI, IRIS No. 447584, AFHRA; "History of the 8th Fighter Bomber Wing: 1 Jan 1955 - 30 June 1955," K-WG-8-HI, IRIS No. 447585, AFHRA.

the armistice agreement and the air defense of South Korea. Again serving only a short tour, and after a year in Asia, Momyer departed Korea in late August 1955 for the high desert of New Mexico.<sup>2</sup>

Momyer returned to the states and reunited with Pat and Jean. On Friday, September 23, 1955, forty-four F-86's took to the skies over Clovis in a salute to the wing's new commander.<sup>3</sup> The display of combat power was a subtle reminder of Momyer's great responsibility. He was accountable to the Commander of Tactical Air Command, General Otto P. Weyland, for the combat capability of his wing, which included the employment of tactical nuclear weapons. The path to a nuclear equipped tactical force had been a long and winding road. In May 1948, the laboratories at Los Alamos began engineering a lightweight nuclear weapon for 'tactical use.'<sup>4</sup> While Momyer was still in his first months at National War College, President Eisenhower moved the nation's defense establishment toward a New Look, as it was dubbed, which stressed atomic power because it offered "a bigger bang for the buck."<sup>5</sup> It also placed a strategically oriented Air Force at the forefront of the country's defense posture in the early years of deterrence.

Accordingly, General Twining, the Air Force Chief of Staff, directed the air arm to focus on the delivery of atomic weapons. To those "who profess to believe that the defense of the free world can be deployed against atomic attack and at the same time concentrated to meet a World War II type offensive," Twining offered, "in the past it has been difficult enough to impose a new strategy on top of an old strategy. To impose now the old strategy on top of the new is out of the question." General Thomas D. White, Twining's vice commander, wrote, "We have recognized that our atomic weapons developments form the only effective counter to the overwhelming mobilized manpower of the

<sup>&</sup>lt;sup>2</sup> "314th Air Division Historical Report: 15 March – 30 June 1955," K-DIV-314-HI, Mar-Jun 1955, IRIS No. 0466096, AFHRA; "314th Air Division Historical Report: 1 July – 31 December 1955," K-DIV-314-HI, Jul-Dec 1955, IRIS No. 0466098, AFHRA.

<sup>&</sup>lt;sup>3</sup> "Will Fly Salute to Col. Momyer," Clovis News-Journal, September 22, 1955.

<sup>&</sup>lt;sup>4</sup> Robert S. Norris, Thomas B. Cochran, and William M. Arkin, "History of the Nuclear Stockpile," *Bulletin of the Atomic Scientists*, August 1985, p. 106.

<sup>&</sup>lt;sup>5</sup> Ronald E. Powaski, *March to Armageddon: The United States and the Nuclear Arms Race, 1939 to the Present* (Oxford University Press, New York, 1987), 62.

<sup>&</sup>lt;sup>6</sup> As quoted in Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force*, vol. 1 (Maxwell Air Force Base, Alabama: Air University Press, 1989), 448.

Soviet."<sup>7</sup> General Otto Weyland, commanding TAC, saw TAC's role as complementary to SAC. He believed SAC should focus on maintaining capability to attack industries and facilities while TAC focused on fielded enemy forces and enemy materials on their way to the battle. In essence, Weyland saw tactical airpower's role unchanged from war's past. The only addition was the increase in firepower available from small nuclear weapons.<sup>8</sup>

In 1954, the 1000-pound Mark 12 tactical nuclear weapon became available. Momyer's wing was equipped with the latest version of the F-86 and each aircraft could carry a single Mark 12 under the left wing. The weapon had a yield, or explosive power, of approximately 12 kilotons, just under the 15 kiloton yield of the atomic bomb dropped on Hiroshima in August 1945. Brigadier General James Ferguson, Deputy Commander of the Ninth Air Force, captured the mentality behind TAC's use of nuclear weapons in a 1954 article:

Today, using this new field of weapons, the striking power of the fighter aircraft has risen to the equivalent of one hundred thousand World War II B-17s. To put it another way, if all these outmoded bombers passed overhead in single file, they would need a week to drop the equivalent explosive force of one modern tactical fighter using one of the new weapons. Think of the physical results of such firepower. Imagine, for example, one fighter aircraft clearing a whole beachhead of opposition. Or, even more serious, imagine a concentration like ours on the Normandy beachhead, being caught by just one hostile bomber loaded with an H-Bomb.<sup>10</sup>

Now that nuclear weapon technology supported carriage on fighter aircraft, TAC found its place in the age of massive retaliation.

Although Momyer's wing was not the first to transition to nuclear weapons, it marked a significant era for tactical airpower. "During the late 1950s our Air Force tactical air forces nearly lost the capacity for nonnuclear operations," Momyer later wrote. "At that time our diminishing tactical air

(Oxford University Press, 1986), p. 143.

<sup>&</sup>lt;sup>7</sup> As quoted in Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force*, vol. 1 (Maxwell Air Force Base, Alabama: Air University Press, 1989), 432.

Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force*, vol. 1 (Maxwell Air Force Base, Alabama: Air University Press, 1989), 437.
 Norman A. Graebner, ed., *The National Security, Its Theory and Practice*, 1945-1960

<sup>&</sup>lt;sup>10</sup> Brigadier General James Ferguson, "The Role of Tactical Air Forces," *The United States Air Force Air University Quarterly Review* 7, no. 2 (Summer 1954), 34-35.

assets were committed to supporting our national strategy of deterrence by the threat of massive nuclear retaliation," a circumstance that "reflected high level decisions based on judgments of the threats of the time, tempered by a tight budget capable of serving requirements only of the highest priority." While the nuclear focus in TAC had to support the national security strategy, it came at the cost of nonnuclear capability. This cost would be felt in the first days of a coming war.

Reflecting TAC's new emphasis on nuclear weapons in the fall of 1955, six squadrons of F-86s from the 312th participated in exercise SAGEBRUSH, the largest joint exercise conducted with the Air Force and Army since World War II. With over 100,000 soldiers from the Continental Army Command (CONARC) and 40,000 Airmen from TAC participating, the scale of SAGEBRUSH was enormous. Both Air Force and Army forces simulated the employment of nuclear weapons in support of a ground campaign and reacted to simulated atomic attacks by the enemy. Based on the exercise, the Air Force concluded that current air-ground doctrine tied a tactical air force to the support of a field army and limited the flexibility of airpower. In the nearly ten years since Momyer had first begun working on air-ground doctrine at TAC, a satisfying solution had yet to be reached on the command and control of air power.<sup>12</sup>

With the advent of nuclear weapons, the profession of arms was rapidly becoming more deadly. Those that advanced within the military hierarchy took on great responsibility. On December 13, 1955, the Air Force promoted Momyer to brigadier general. Having spent nearly 13 years as a colonel, the promotion seemed a long time coming. However, Momyer's promotion to colonel came five years after he was commissioned, and he was a very young general in the big scheme of things: 39 years old, with 16 years of active duty

<sup>&</sup>lt;sup>11</sup> "Tactical Air Operations: Proposed Article by General Momyer for AWC Chapter on General Purpose Forces," 168.7041-29, June 1970, p. 4, from General Momyer Papers, AFHRA.

<sup>&</sup>lt;sup>12</sup> "314th Air Division Historical Report: 1 July – 31 December 1955;" Major General John D. Stevenson, "Exercise SAGEBRUSH," *The United States Air Force Air University Quarterly Review* 8, no. 4 (Fall 1956), 15-38; Lawrence Freedman, *The Evolution of Nuclear Strategy* (Palgrave Macmillan, New York, 2003), 104.

 $<sup>^{13}</sup>$  "Biography of Brigadier General Momyer" in History of the 832d Air Division, K-DIV-832-HI, 8 Oct - Dec 1957, IRIS No. 0467468, AFHRA.

service. Promotion to brigadier general was a careful and deliberate process. There was one promotion board per year. A four star general chaired the board. Nine three star generals came from across the Air Force to serve as board members. They scored promotion records for five days straight. At the end of that period, the board ranked the top 100 based on an average of all scores of the board members. The list was then hand carried to the Air Force chief of staff for his review. He poured through it name by name to select the top 50 candidates, most often, but not always sticking to the top 50 scored by the board. An aide then hand carried the chief's list to the Secretary of the Air Force for review. The Secretary of Defense then approved the list before the President reviewed the names. The Senate held the final authority to approve the President's nominations. In an era of SAC dominance, the promotion of a tactical Airman to general officer rank carried a signal. Air Force leaders had selected Momyer as one of the men to carry the torch of tactical airpower as he moved on to senior leadership positions.

General and Mrs. Momyer were busy people in New Mexico. Marguerite attended numerous officers' wives club social events and met frequently for bridge with the other ladies from the base. There were, too, the numerous events on base and downtown that she and General Momyer attended together. Jean, now nineteen, followed in the family footsteps and had a gift for music. She wrote and directed the 1955 Christmas pageant for the base. She attended classes at Eastern New Mexico University in Portales, just a few miles to the south of the base, where she majored in drama and English. They were all busy, but very happy to be together as a family.

Momyer was a good wing commander. He brought in some of the strongest group commanders from across TAC. He worked with New Mexico Senator Dennis Chavez to get funding for numerous building projects on the base. Concerned over the base's appearance, he established dress codes and instituted a monthly parade. He ranked each of the squadrons on their performance. Although the personnel at Clovis initially scoffed and cursed

<sup>14</sup> Major General James H. Watkins Oral History, 27 – 28 November 1984, p. 50-54,
 K239.0512-1616, IRIS No. 1040303, AFHRA.

<sup>&</sup>lt;sup>15</sup> "Christmas Pageant at CAFB Chapel Tonight," *Clovis News-Journal*, December 18, 1955.

<sup>&</sup>lt;sup>16</sup> "Summer Theatre Rehearsal," Clovis News-Journal, July 6, 1956, 3.

Momyer's methods, a lieutenant recalled, "we all started becoming very proud of the organization and the unit . . . he really made us into a crackerjack unit." Momyer worked right alongside his Airmen to make Clovis tops in TAC. One of the Airmen in his organization remembered, "The man worked from daylight to well past dark every day." In a moment of great and unusual public candor, Momyer's immediate boss, Major General Timberlake, once told a reporter for the record that Momyer was, "the finest wing commander in all 12 units under my command."

While wing command was demanding, Momyer somehow not only found time to build bonds in the local community, but also managed to travel around the Air Force. On one particular occasion, he travelled to San Angelo, Texas to address the new pilot training graduates at Goodfellow Air Force Base. His premise for the young men: think. "You are leaving the status of amateur," he began, "and joining a team of professionals, a team dedicated to keeping this country safe through air power." Momyer then settled into his theme. "Just how proficient you will become will depend upon how you think things through," Momyer told them. "Let me seriously recommend that periodically through your career you stop and analyze yourself, your equipment, and the men with whom you work," he said, and "know the capabilities of all, and especially yourself." The general closed with, "You will have nothing to fear so long as you take time to think." These were fitting remarks for one of the more intellectually active officers in the Air Force.

In the summer of 1956 Momyer lead his wing's atomic weapon delivery team to victory at the Ninth Air Force Air-to-Air Gunnery Meet at Wendover. In addition to the atomic delivery trophy, the wing also won the meet overall, bringing the privilege of representing Ninth Air Force at the 5th Annual Fighter Weapons Meet at Nellis Air Force Base in Las Vegas, Nevada, where Momyer addressed the assembled pilots. As a World War II ace, Momyer commanded

<sup>&</sup>lt;sup>17</sup> Major General James R. Hildreth Oral History, by James C. Hasdorff, 27-28 October 1987, K239.0512-1772, AFHRA, p. 24.

<sup>&</sup>lt;sup>18</sup> Major General James R. Hildreth Oral History, by James C. Hasdorff, 27-28 October 1987, K239.0512-1772, AFHRA, p. 24.

<sup>&</sup>lt;sup>19</sup> "Gen. Timberlake Visits Clovis Air Force Base," *Clovis News-Journal*, February 29, 1956, 1.

<sup>&</sup>lt;sup>20</sup> "Gen. Momyer Speaker For Pilot Graduates," Clovis News-Journal, April 1, 1956, 20.

the attention of a fighter pilot audience. Reflecting on the fighter-bomber force of the USAF, Momyer's speech focused on, "a fresh approach to the ever increasing problems associated with this type of weapons system." In order to bring the aircraft up to date, Momyer felt fighter-bombers must be made more capable in a counter air role and needed upgrades in both navigation and delivery systems for better weapons employment.<sup>21</sup>

Momyer also reiterated his long-standing thought on the application and indivisibility of airpower. "No longer," he said, "in my opinion, can we arbitrarily assess targets on historical divisions of air power. Target systems must be perceived in terms of the most efficient carrier and weapon to produce the desired effect." He believed, "if our concept dictates the neutralization of the opposing air force, then it is axiomatic that our striking potential must be designed to that end as a primary quality." In closing, Momyer again emphasized the fallacy of stove-piping airpower into categories. "If we are to provide for the effective deterrent and striking capability of the force," he said, "we must think of it in terms of selecting the weapon and the carrier most suitable to the demands of war."<sup>22</sup>

In this and other speeches, Momyer continued to convey the efficacy of air superiority as the first focus in an air campaign. He went as far as calling targets associated with the air-ground battle "exploitation operations," and maintained that once the enemy air force was eliminated, the war could not be lost. Momyer not only believed in airpower's indivisibility, but also its versatility. He felt, particularly with atomic weapons and aerial refueling, fighter-bombers could deliver weapons as well as bombers could. These meant fighter-bombers could cover the gamut of Air Force missions. Later in his career, Momyer strongly advocated for aircraft that could adequately accomplish many missions as opposed to a single mission. That idea, which started with his command of fighter-bomber squadrons in World War II, was further solidified during his time in New Mexico.

<sup>21</sup> Speech by Brigadier General William W. Momyer at USAF Fighter Weapons Critique, "History of the 312th Fighter-Bomber Wing: 1 Jul 56 – 31 Dec 56," K-WG-312-HI, IRIS

No. 455300, AFHRA.

<sup>&</sup>lt;sup>22</sup> Momyer Speech at USAF Fighter Weapons Critique.

Momyer also shared his thoughts on the nature of tactical airpower in the commander's appraisal for the 1956 wing history. In this document, Momyer wrote in World War II,

It was not uncommon to find numbered air forces being used against targets irrespective of their categorization as tactical or strategic. The preparation of the fighter-bomber wing, as well as bombers, encompassed the capacity to undertake targets deep in the homeland of the enemy or objectives directly related to the actions of the field forces. Today, tactical forces have been assumed to be those forces that primarily operate under conditions short of a general war or as a part of theater forces. This, then, imposes a multiplicity of functions in war that require generalization rather than specialization.<sup>23</sup>

Momyer believed multi-purpose aircraft were not only a choice to capitalize on the flexibility of airpower, but also a requirement to meet the challenges of future conflict.

In December 1956, the wing upgraded to the new multi-purpose F-100 Super Sabre. As Momyer took delivery of the wing's new aircraft, Air Force leaders continued to search for a balance between conventional and nuclear capability. To accomplish this, Twining called for a leadership conference in the spring of 1957. During the deliberations, General White advocated a public relations campaign to educate Americans on the large differences between the nuclear weapons in the SAC and TAC inventories. The chief of Air Force research, Lieutenant General Samuel Anderson, postulated "it would be inconsistent to continue to plan to use conventional weapons in view of the types and numbers of aircraft that were operational and projected; the speeds, bombing accuracies, and guidance systems that these planes would possess; and the hardening of enemy targets." General Weyland, on the other hand, argued for a continued conventional capability, thinking a deterrent of "only atomic retaliation would severely prescribe the US bargaining position at the conference table and turn the mass of human opinion against us; whereas possessing a conventional retaliation, could place world opinion on our side."24

 $<sup>^{23}</sup>$  "History of the 312th Fighter-Bomber Wing: 1 Jan 56 – 30 Jun 56," K-WG-312-HI, IRIS No. 455299, AFHRA.

<sup>&</sup>lt;sup>24</sup> As quoted in Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force*, vol. 1 (Maxwell Air Force Base, Alabama: Air University Press, 1989), 462.

A new aircraft type at Clovis and the competition of ideas within the Air Force hierarchy meant Momyer continued to deal with the challenge of balancing nuclear and conventional capabilities at the wing level throughout 1957.

The year was a momentous one for Momyer for another reason. His little girl got married. Since the Momyer's arrival at Clovis, Jean had been a permanent fixture around many of the base's activities. Every bit as striking as her mother, she was hard to miss. One daring aviator lieutenant from the 429th Fighter-Bomber Squadron was evidently more overwhelmed by Jean then he was by the fear of attempting to date the wing commander's daughter. It was a gamble that paid off. The April 21 edition of the town newspaper read, "Brigadier General and Mrs. William W. Momyer of Clovis Air Force Base are announcing the engagement and forth-coming marriage of their daughter, Jean, to Lt. Darrell Pilipovich, also of Clovis Air Force Base." The two were married on June 30, 1957.26

That same month, Clovis became Cannon Air Force Base. The base's namesake was General John K. Cannon, Momyer's boss through many assignments and one of the great tactical Airmen. At about the same time, General Thomas White assumed responsibilities as the new Chief of Staff of the Air Force. As he became the top Air Force officer, White and other Air Force senior leaders attempted to clarify the Air Force position on limited or local wars. The official position held "that the Air Force requirements in any local war situation could be met with forces and resources provided for general war purposes." Further, "local war operations could be supported from available stocks and facilities provided some minimum calculated risks were assumed." As he had before, Weyland characterized TAC's role in the Air Force's position. Although there were many potential hot spots around the world, Weyland noted, the friendly nations in those spots generally had ground forces but lacked airpower. "If they know they will be supported quickly, they may be

<sup>&</sup>lt;sup>25</sup> "Engagement Announced," Clovis News-Journal, April 21, 1957, 13.

<sup>&</sup>lt;sup>26</sup> Ancestry.com. *Texas Marriage Collection*, 1814-1909 and 1966-2002 [database online]. Provo, UT, USA: Ancestry.com Operations Inc, 2005.

depended upon to fight in defense of their own country," because TAC forces could "provide the decisive balance of power in time to be effective."<sup>27</sup>

Weyland was one of the Air Force's biggest proponents for this capability, but it was not a new philosophy. In January 1955, National Security Council Memorandum 5501 acknowledged that a reliance on nuclear retaliation and continental defense might lead the Soviet Union to "increase local aggression without fear of retaliation from the United States." In recognition of this dilemma, the Eisenhower administration looked to develop a mobile force concept that could protect vital interests abroad. These forces were to maintain an atomic capability to not only support contingency tasking, but to be available in case of general war.<sup>28</sup>

The Composite Air Strike Force (CASF) concept emerged to fill this need. The concept was institutionalized by a new numbered air force in TAC, the 19th Air Force. In November 1957 Momyer's wing participated in Operation MOBILE ZEBRA, a test of the CASF concept."29 In January of 1958, General White wrote about the deterrent value of the CASF and tactical forces in an article for the Air Force Magazine. By a deliberate methodology, White laid out the Air Force mentality for limited or local wars. "Simply stated," he began, "the national policy in local war is, first to deter conflict, and second, failing that deterrence, to cope with it successfully." He then further clarified, if conflict is inevitable, it must be waged "so as to invoke the least risk of aggravating the conflict into general war." White believed two principles lessened the risk of general war: the rapid application of force, and the resolute application of force. "These principles," he wrote, "call for a military capability, within and not separate from or in addition to total US forces, which is instantly ready, flexible, and selective, including nuclear firepower." Later quoting Secretary of State Dulles, White aligned the Air Force capability with national policy. The use of nuclear weapons in local conflict "need not involve vast destruction and widespread

<sup>27</sup> As quoted in Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force*, vol. 1 (Maxwell Air Force Base, Alabama: Air University Press,

<sup>1989), 464.
&</sup>lt;sup>28</sup> Warren A. Trest, *Air Force Roles and Missions: A History* (Washington, D.C.: Air Force History and Museums Program, 1997), 166-167.

<sup>&</sup>lt;sup>29</sup> "Gassin' the Silver Zebras," *Pacific Stars and Stripes*, January 5, 1958, p. 14; other info on Mobile Zebra from

http://www.fabulousrocketeers.com/Photo\_F100\_5\_MobileZebra.htm

harm to humanity," the Dulles quote read, "it may be possible to defend countries by nuclear weapons so mobile, or so placed, as to make military invasion with conventional forces a hazardous attempt."<sup>30</sup>

Possibly as a calculated move to give strength to TAC's deterrent value, General Weyland formally announced TAC's nuclear capability to the public in March. "In the nuclear and thermonuclear age, TAC now possesses the versatility that it achieved in World War II with conventional weapons for the destruction of enemy air forces, ground forces, naval forces, and supply and transportation," Weyland revealed to what was likely an unsurprised audience. He went on, "this is a significant step in the variety and spectrum of weapons that forces of TAC can now employ under any type emergency or contingency."31 In the local Clovis newspaper, Momyer offered his thoughts on the announcement. He first confirmed his F-100Ds trained for the nuclear mission every day in the skies over Eastern New Mexico and the Texas Panhandle. "It is worthy of emphasis that the F-100D Super Sabre, despite its extreme versatility in combat is primarily an instrument of peace," he said, for "it is a vital part of the great deterrent force, which today quietly and effectively challenges aggression anywhere in the world." Given the opportunity, Momyer relayed his thoughts on future conflicts. "Today, limited wars seem the most immediate threat to world peace," and, "Tactical Air Command is today the principal deterrent to such threats and is prepared to deal with them quickly and effectively should they become a reality." In closing, Momyer harkened the success of the CASF concept. "All of us should have pride in the fact that the same F-100D and pilot observed in our skies today, can be on a mission of peace or war half-way around the globe in a few hours."32

In July, Momyer relinquished command of the wing in front of 1,000 people and 48 F-100s roaring overhead. In their first move without Jean, the Momyer's prepared for a cross-country trip. Their destination was Langley Air Force Base and another tour on the TAC Staff. This time Momyer was slated to

30 General Thomas D. White, "USAF Doctrine and National Policy," *AIR FORCE* 

Magazine, January 1958.

Policy," AIR FORCE

<sup>&</sup>lt;sup>31</sup> "Tactical Air Command Observes 12th Anniversary," *Clovis News-Journal*, March 21, 1958, p. 10.

<sup>&</sup>lt;sup>32</sup> "Cannon Air Force Base Makes Contribution to US Security," *Clovis News-Journal*, March 21, 1958, p. 10.

replace Major General W.D. Stevenson as the Director of Plans in the Deputy Commander for Operations staff. Although it was their third assignment at Langley, this was their first time to live on Benedict Avenue. 'General's row' was a picturesque street on Langley that ran along an offshoot of the Back River. The street was lined on each side with single family homes built in the Tudor style of the 1940's. Nine general officers were on the TAC staff and they all lived within two city blocks.

At the center of the street, with a grand backyard overlooking the river, was the home of General Weyland. When Momyer arrived at TAC, Weyland was starting his last full year of service as the commander. Known best as 'Patton's Airman' on the European front of World War II and as the Far East Air Force (FEAF) Commander for much of the conflict in Korea, Weyland was truly a legend amongst Airmen. Not surprisingly, he and Momyer were of the same cloth. At his assumption of command in 1954, Weyland emphasized, "I have stressed the indivisibility of air power and the necessity of centralized control of air resources as much as any man alive." Later, as the CASF concept solidified, he called for, "adequate tactical air forces in being that are capable of serving as a deterrent to the brush-fire type of war just as SAC is the main deterrent to a global war. Any fighting that we get into in the foreseeable future will very probably be of the peripheral type." Under Weyland's leadership, TAC grew from a command purely focused on support of the surface force to one that could employ all facets of offensive airpower.

Just before Momyer's arrival at TAC, General Weyland accepted the first Republic F-105 Thunderchief at a ceremony at the Republic Aviation Corporation Plant in Farmingdale, New York. Built specifically for low-altitude, supersonic delivery of tactical nuclear weapons, the 'Thud' represented the continued pursuit of TAC's ability to not only deter small wars, but also their focus on "launching an atomic punch aimed . . . at turning the enemy military machine into a relatively innocuous group of men by depriving it of the means

<sup>33</sup> Quoted in Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force*, vol. 1 (Maxwell Air Force Base, Alabama: Air University Press,

<sup>&</sup>lt;sup>34</sup> Quoted in Mark Clodfelter, *The Limits of Air Power: The American Bombing of North Vietnam* (Lincoln, Nebraska: The University of Nebraska Press, 1989), 32.

of waging war."<sup>35</sup> Air Force leaders believed they had it right and were providing for a flexible force. "A long-time Air Force objective has been a tactical all-weather capability to react quickly and selectively on a global basis," wrote General White, "the F-105 represents a long stride toward this goal." White believed the F-105's "capacity for close air support of ground troops, in particular, was far superior to anything the Air Force has been able to provide in the past," because it possessed, "an improved loitering capability and can deliver its weapons against ground targets at supersonic as well as low subsonic speeds."<sup>36</sup> The aircraft would soon see battle in a drastically different environment than originally intended.

The world of 1958 was full of turmoil. In the middle of Momyer's drive to Langley, the CASF deployed to Turkey to counter a potential revolution in Lebanon. A month later, just as Momyer settled in to the familiar environs of the TAC staff, mainland communist Chinese forces began shelling the nationalist Chinese islands of Quemoy and Matsu. Many believed it was the precursor of a communist Chinese invasion of Taiwan. Almost immediately, the United States deployed an F-86 squadron from Kadena Air Base in Okinawa to Taiwan to bolster the Taiwanese forces. As a partial reflection of the activities in Lebanon and Quemoy, many in the Defense Department felt an increased need to prepare for the potential of limited war. "Out of the confidence and the lessons of Lebanon and Quemoy," a 1959 Time magazine article reported, "the Pentagon stepped up limited-war capability (from sixth priority to third priority, behind deterrent and retaliatory capability). But the broadening spectrum of limited power, and the growing military-diplomatic sophistication (the US staff chiefs even have a planning committee for 'pseudo-military' missions such as flying refugees from one country to another), still rested —as did the whole free world—under the air cover of the Strategic Air Command."<sup>37</sup> Yet, despite these indications, Air Force leaders continued to believe that limited war capability was inherent in the capacity to wage general war.

-

<sup>&</sup>lt;sup>35</sup> General Edward J. Timberlake, Ninth Air Force Commander, 1956 quote in Eduard Mark, *Aerial Interdiction: Air Power and the Land Battle in Three American Wars* (Washington, D.C.: Center for Air Force History, 1994), 325.

<sup>&</sup>lt;sup>36</sup> General Thomas D. White, "USAF's Ten Top Priorities," *AIR FORCE Magazine*, September 1960, 53-54.

<sup>&</sup>lt;sup>37</sup> "The Course of Cold War," *Time*, 5 January 1959.

As TAC focused on deterrence and the delivery of tactical nuclear weapons, the Army once again believed that their needs for close air support were being ignored—a development Weyland acknowledged but defended, given the nation's security strategy and limited resources. As a result, the Army began to further pursue its own aviation interests. Major General Hamilton H. Howze became the first director of Army aviation in 1955, and by 1958, the Army was testing armed helicopters in support of reconnaissance operations. Some elements of the Air Force did not oppose the Army's aviation expansion, but instead sought to encourage it. Only after strong opposition from Weyland did the Air Force reject a LeMay proposal to relinquish the mission of support of battlefield operations to the Army and consolidate Air Force airpower in a single offensive force command.<sup>38</sup>

In August 1959, General Frank F. Everest assumed command of TAC from General Weyland. Everest was another Korean War veteran who had commanded Fifth Air Force for a year beginning in the summer of 1951. Later, General Everest recalled his time with Momyer. "Spike Momyer is one of the few men whose only interest is in his work," Everest remembered, "he was capable of working 16 hours a day." Everest felt Momyer was "hardheaded," resulting in a number of debates between them. "He was one of the few guys that I allowed to come back in the office to discuss the same subject the second or even third time," Everest recalled. Often these discussions only ended when Everest stated, "Spike, I have talked with you all I intend to about this subject. You are going to do it my way. Now let's get that thoroughly understood." Without fail, Momyer always responded, "Yes, sir, and he would get up and leave the office." Everest remembered the 'yes, sir' held nothing but loyalty. "You couldn't ask for a more loyal officer," said Everest, "he was at times hard to convince, but once he was convinced or directed, then he would follow his instructions right to the letter, never any question about that."39

Everest viewed Momyer's work habits as a professional weakness. "He was such a hard worker himself that he was loath to delegate responsibility to his subordinates." Everest thought Momyer, "has always been that way, a very

38 Trest, Air Force Roles and Missions, 176-177.

<sup>&</sup>lt;sup>39</sup> General Frank F. Everest Oral History, by Lt Col John N. Dick, Jr., 23 -25 August 1977, p. 358 -359, K239.0512-957, IRIS No. 1034248, AFHRA.

good thinker, a very sound thinker, and an exceedingly conscientious officer, completely dedicated, but he didn't have a hobby outside of his work." Everest believed these habits were unfair to Momyer's subordinates. Everest held a leader should delegate responsibility to subordinates after appraising their strengths and weaknesses. "If you don't do that," he said, "you are doing them an injustice, and you are stifling their development."

While many viewed Momyer's aversion to delegation as a professional weakness, it undoubtedly put him in the middle of much activity. As might be expected, as the head of TAC plans, Momyer owned responsibility for and was intimately involved in the preparation of plans for limited war. In early 1960, Everest ordered Momyer to develop a planning group for coordination between TAC and the United States Continental Army Command (USCONARC) at Fort Monroe, just down the road. A Joint Planning Group (JPG) formed to provide guidance and oversight on contingency plans involving both services. Momyer and four other senior officers from TAC served alongside five senior officers from USCONARC Headquarters in this capacity. Additionally, a Joint Plans Development Group (JPDG) formed at Fort Bragg, North Carolina to complete the everyday work of the planning coordination. With equal Army and Air Force representation, this group answered directly to Momyer. The JPDG focused on the joint aspects of contingency plans and ensured the individual service plans complimented each other. The group recommended any revisions to Momyer.

Once again, Momyer mastered the arguments and gained exposure to the conflicts in the arena of service cooperation. However, since 19th Air Force was exclusively a planning headquarters for contingency operations, the JPDG created confusion. General Maurice Preston, who took command of the 19th from General Viccellio, later remembered Momyer saw the 19th duplicating the work of the TAC plans staff at Langley.<sup>42</sup> In a reflection of his 'take charge' attitude, Momyer ensured the 19th coordinated with the JPDG at all levels of plan development.

<sup>&</sup>lt;sup>40</sup> General Frank F. Everest Oral History, by Lt Col John N. Dick, Jr., 23 -25 August 1977, p. 358 -359, K239.0512-957, IRIS No. 1034248, AFHRA.

<sup>&</sup>lt;sup>41</sup> TAC Official History, July-December 1960, 76-78.

<sup>&</sup>lt;sup>42</sup> General Maurice A. Preston Oral History, 13 -15 September 1977, p. 232, K239.0512-973, IRIS No. 1042066, AFHRA.

Commensurate with Momyer's work on limited war plans, the Air Force changed their outlook on preparation for this type of conflict. "The Air Force must have a sound, well conceived program for forces which can contribute to a limited war of any magnitude," General White stated near the end of 1960. "It will not suffice to say that we are well prepared for limited war because we have nuclear weapons in quantity." At least a portion of this decision was based upon politics. Eisenhower was not eligible for reelection. White believed whoever won the presidency next, all signs pointed to an increased emphasis on limited war. He attempted to get the Air Force moving in the new direction. 44

The Air Force Director of Plans, Major General Glen Martin, wrote a memo to White detailing preparations for limited war. He still believed the Air Force required the capability to permit, "decisive application of the required amount of force (to include nuclear or non-nuclear weapons where militarily appropriate.)" Unlike the Army, who wanted to create a special "limited war force," Martin thought the "inherent flexibility of the Air Force's weapon system made such a force unnecessary."45 This belief in flexibility arose in deliberations of the 'New Approach Group,' a committee to determine where the Air Force should put emphasis for future aircraft development. Momyer served as TAC's representative alongside members from the major commands, as well as the Air Staff. Since TAC and ADC owned the majority of fighter aircraft, Momyer and Brigadier General Arthur Agan, the ADC plans chief, played a major role in the fighter discussions. General William Y. Smith, then a Lieutenant Colonel and the executive secretary of the committee, recalled, "what we came out with was largely, because of Momyer's and Agan's influence with a little bit of my help, an all purpose fighter which would be useful for nuclear as well as non-nuclear missions. Momyer was a big influence in seeing to the outcome of that, and the other people agreed to it." Smith agreed with Momyer's basic philosophy of the time, "get an aircraft that can do a number of

<sup>&</sup>lt;sup>43</sup> As quoted in Charles H. Hildreth, "USAF Logistic Preparations for Limited War, 1958-1961," October 1962, USAF Historical Division Liaison Office, 11.

<sup>&</sup>lt;sup>44</sup> Charles H. Hildreth, "USAF Logistic Preparations for Limited War, 1958-1961," October 1962, USAF Historical Division Liaison Office, 11.

<sup>&</sup>lt;sup>45</sup> As quoted in Charles H. Hildreth, "USAF Logistic Preparations for Limited War, 1958-1961," October 1962, USAF Historical Division Liaison Office, 11-12.

things reasonably well rather than one aircraft that can do one thing better than anyone else." $^{46}$ 

As Momyer neared the end of his time at TAC, world events began to further change the importance of tactical airpower in the defense strategy of the United States. In a speech delivered on January 6, 1961, some weeks after Senator John Kennedy had defeated Vice President Richard Nixon for the presidency, Soviet Premier Khrushchev called for full support of guerilla and insurgency wars across the globe. In response, Kennedy began focusing on preparations for limited war and approved large increases in both the defense budget and the number of personnel each service possessed.<sup>47</sup>

Despite calls for limited war preparations, a potential conflict in Western Europe continued to dominate the minds of many Airmen. Shortly after Khrushchev's announcement, Lieutenant General John K. Gerhart, the Air Force Deputy Chief of Staff for Plans and Programs, wrote about a fear of a focus on limited war preparation. He felt this focus could affect the deterrent value of the Air Force's general war capability. In a conventional war with the USSR, the Russians could take advantage of their immense numerical superiority. A 2,000,000 man Army, 800,000 man Air Force, and 700,000 man Navy, Gerhart believed, were not numbers to take lightly. "It is fallacious to assume," Gerhart wrote, "that we could find a safe retreat from the perils of general war by turning the clock back to 1918 or 1942 and committing ourselves to fight limited wars with the outmoded combat techniques of World Wars I and II." 48

Coincidentally, the 'outmoded combat techniques of World War II' were in full preparation. During 1960, Momyer worked on TAC inputs for a plan to combat the influence of the Viet Cong in South Vietnam. These communist insurgent forces were becoming active throughout the country. After months of coordination by numerous agencies, President Kennedy and his Secretary of

<sup>&</sup>lt;sup>46</sup> General William Y. Smith Oral History, by Hugh N. Ahmann, April 1990 – April 1996, p. 217, 274, K239.0512-2040, IRIS No. 112046, AFHRA.

 <sup>&</sup>lt;sup>47</sup> Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force*, vol. 2 (Maxwell Air Force Base, Alabama: Air University Press, 1989), 22-40.
 <sup>48</sup> As quoted in Charles H. Hildreth, "USAF Logistic Preparations for Limited War, 1958-1961," October 1962, USAF Historical Division Liaison Office, 16-17.

Defense, Robert McNamara, approved the plan.<sup>49</sup> In April of 1961, TAC stood up a new training organization – the 4400th Combat Crew Training Squadron, nicknamed 'Jungle Jim.' Momyer later recalled McNamara believed Vietnam should be a "laboratory for the development of organizations and procedures for the conduct of sub-limited war." This belief, Momyer said, led to "an all-out effort to put together a unit of World War II aircraft capable of fighting sublimited wars."50 United States involvement in Laos on the side of government forces fighting the communist-backed Pathet Lao also drove the formation of the new unit. Since the CIA was supporting operations in Laos with older model aircraft, the Air Force recognized these aircraft were a good way to train Air Force pilots to equip smaller nations with an airpower capability. In recounting the genesis of this idea, General LeMay, who was the Vice Chief of Staff at the time, derisively remembered, "we had to dig up something off the junk heap, rebuild it, so it would fly, and then put the junk in action."51 The Air Force equipped Jungle Jim with sixteen C-47s, eight B-26s, and eight T-28s.52

President Kennedy's emphasis on limited wars affected the Air Force on a much broader scale. Although still important for deterring a general war, SAC's preeminence in the Air Force began a subtle slide based on tactical aviation's role in both conventional and counterinsurgency missions. It was nearly ironic that when SAC's greatest hero, General Curtis LeMay, replaced General Thomas White as Air Force Chief of Staff in July of 1961, SAC's influence in the Air Force was enjoying the last years at its peak. Although the end of the Vietnam War provided the most visible example of the new found prominence of tactical Airmen, the evolution began in those first days of the Kennedy administration. For Momyer and the rest of the tactical Airmen, this evolution meant an even greater impact on the Air Force's path into the future.<sup>53</sup>

<sup>&</sup>lt;sup>49</sup> Jacob Van Staavern, "USAF Plans and Policies in South Vietnam, 1961-1963," USAF Historical Division Liaison Office, June 1965, 5-6.

<sup>&</sup>lt;sup>50</sup> Airpower in Three Wars, 12.

<sup>&</sup>lt;sup>51</sup> General Curtis E. LeMay Oral History, by Dr. Thomas G. Belden, 29 March 1972, p. 2-3, K239.0512-591, IRIS No. 00904611, AFHRA.

<sup>&</sup>lt;sup>52</sup> Robert F. Futrell, *The United States Air Force in Southeast Asia: The Advisory Years to* 1965 (Washington, D.C.: Office of Air Force History, 1981), 79.

<sup>&</sup>lt;sup>53</sup> Trest, Air Force Roles and Missions, 192.

In the late summer of 1961, General Everest suffered a heart attack, which prompted LeMay to ask for his resignation.<sup>54</sup> This also allowed LeMay to put a 'SAC man' in charge of TAC, General Walter Sweeney. Momyer was also at the end of his assignment, and his next job was just a short drive away, at the Pentagon, on the Air Staff, as the Director of Operational Requirements.<sup>55</sup>

Just a day before Momyer reported for duty, President Kennedy authorized Detachment 2A of the 4400th Combat Crew Training Squadron, code named Farm Gate, to deploy to Bien Hoa, Republic of Vietnam. As Momyer remembered, the Air Force had vigorously "pushed for the deployment of a detachment of the 4400th to South Vietnam to train the South Vietnamese in the techniques of air-ground operations and to devise new techniques for incorporation into our own air doctrine." Although Farm Gate's purpose was to train, Momyer recalled "our crews soon found themselves flying combat missions in response to emergency requests," because the South Vietnamese Air Force, "simply could not provide all of the help that was urgently needed by the South Vietnamese Army." The U.S. involvement in Vietnam was deepening by the day.

In the last months of 1961, the Kennedy administration's new emphasis on limited warfare continued to shape the Air Force. The service was unable to secure continuation of the B-70 bomber program, mobility and transport forces increased in size to support transportation of ground forces around the world, more Minuteman missiles were acquired to help solve the perceived missile gap, funds were allocated to give the F-105 a conventional weapons delivery capability, and the development of a new fighter began.<sup>58</sup>

The combination of these factors made the Pentagon a very active place in 1961. After a career in tactical aviation, Momyer certainly spent some time adjusting to the Pentagon culture. It was not just the politics or the high-level deliberations that challenged Momyer's professional flexibility: LeMay's tenure

<sup>&</sup>lt;sup>54</sup> General Frank F. Everest Oral History, by Lt Col John N. Dick, Jr., 23 -25 August 1977, p. 271, K239.0512-957, IRIS No. 1034248, AFHRA.

<sup>&</sup>lt;sup>55</sup> Mike Worden, *Rise of the Fighter Generals, The Problem of Air Force Leadership: 1945 - 1982* (Maxwell Air Force Base, Alabama: Air University Press, 1998), 104-105, Worden's sources are from Oral Histories of Everest and LeMay.

<sup>&</sup>lt;sup>56</sup> Airpower in Three Wars, 283.

<sup>&</sup>lt;sup>57</sup> Airpower in Three Wars, 12.

<sup>&</sup>lt;sup>58</sup> Futrell, *Ideas, Concepts, Doctrine*, vol. 2, 30 -75.

as the Chief of Staff resulted in an even stronger strategic focus for the Air Force. This was reflected not only in his placement of Sweeney at TAC, but also in his selection of a great number of SAC officers for Pentagon duty. "He was the one who made the strategic thing everything," recalled one staff officer from this period. "He not only channeled a terrific portion of our resources into strategic [forces], but he filled a whole headquarters with strategic Air Force people." By the end of Momyer's tour at the Pentagon, "three-fourths of the highest-ranking Air Force officers in the Pentagon came directly from SAC." Although Momyer's views on tactical airpower resulted from years of experience, his views on strategic airpower would be heavily influenced by his time on the Air Staff under LeMay's leadership.

As the Director of Operational Requirements, Momyer played a major role in determining the path for future Air Force equipment. Since the development cycle of a weapons system at the time was about five years from start to deployment, even a three year tour could result in a significant impact on the Air Force's path for the future. In this capacity, Momyer led Airmen in nine separate divisions: Operations Testing and Evaluation, Modification Program Office, Air Defense Division, Operations Support Division, Reconnaissance Division, Strategic Air Division, Tactical Air Division, Supporting Commands Division, and the Monitoring Systems Group. According to Major General James Hildreth, who served under Momyer in both in New Mexico and on the Air Staff, Momyer's philosophy on the development of aircraft was simple, "exploit technology to the fullest and if it wasn't an improvement in technology, if it didn't fly faster or higher, if it wasn't a better airplane than we've got, then we're making a step backwards."

Just as he had in Clovis, Momyer began to recruit officers from around the Air Force to fill the positions in requirements. When one of Momyer's former lieutenants from Cannon received an assignment to the requirements staff as a major, he remarked to one of the division chiefs, "Damn, thanks a lot. Are you responsible for that?" After responding in the negative, the division

<sup>&</sup>lt;sup>59</sup> Brigadier General Noel F. Parrish, as quoted in Clodfelter, *The Limits of Air Power*, 29.

<sup>&</sup>lt;sup>60</sup> Clodfelter, The Limits of Air Power, 29.

<sup>61</sup> Boyne, Beyond the Wild Blue, 253.

 $<sup>^{62}</sup>$  Major General James R. Hildreth Oral History, by James C. Hasdorff, 27-28 October 1987, K239.0512-1772, AFHRA.

chief said, "General Momyer makes the assignments. If you want to get out of it, you come bitch to him. You come see him." The major's response was simple, "Oh, Jesus."<sup>63</sup>

Momyer's strong belief in the power of technology made him a proponent of taking guns out of fighter aircraft. Major General Frederick "Boots" Blesse, an ace from the Korean War and one of the great fighter leaders, had a number of conversations with Momyer over the years on this subject. In an interview after his retirement, Blesse recalled:

General Momyer, bless his heart, was one of the fuzzy thinkers in that area (missiles). He was in Requirements in the Pentagon. He was determined that the missile was the name of the game, guns just did not have any part in anything from then on. In fact, I went to see General Momyer when he was I think a full colonel, I was a Major at the time, in early 1953 or 1954. His statement to me was, "You goddamn fighter pilots are all alike. You get a couple of kills with a gun and you think that the gun is going to be here forever. Why can't you look into the future and see that the missile is here and the guns are out? There is no need for a gun on an airplane anymore."

When briefing Momyer on a gun proposal for the McDonnell Douglas F-4, another Pentagon staff officer remembered Momyer pounded on the table and said, "There will be a gun in the F-4 over my dead body." It was not long before Momyer realized the newest technology was not always 100% effective.

As the Chief of Requirements for the Air Force, Momyer held a key job. The force of his personality and the strength of his ideas made it even more important. At the time, Colonel (later Major General) Richard Catledge was serving in the Deputy Chief of Staff for Operations staff. "As I looked and listened," Catledge recalled from his first meeting with Momyer in attendance, "I realized this two-star Gen Spike Momyer ran the Air Staff -- very strong-minded individual, very knowledgeable individual, who did his homework on everything. He just knew so much more than anybody else that he just really ran the Air

<sup>&</sup>lt;sup>63</sup> Major General James R. Hildreth Oral History, by James C. Hasdorff, 27-28 October 1987, K239.0512-1772, AFHRA, p. 56.

<sup>&</sup>lt;sup>64</sup> Major General Frederick C. "Boots" Blesse Oral History, 14 February 1977, p. 59-60, K239.0512-1077, IRIS No. 110496, AFHRA.

 $<sup>^{65}</sup>$  Major General Richard Catledge Oral History, 30 September 1987, p. 32, K239.0512-1768, IRIS No. 1095061, AFHRA.

Staff."<sup>66</sup> Major General Gordon H. Austin, who was Momyer's deputy when he first arrived in Washington, D.C., remembered Momyer's intellect and work ethic as well. "I think that he is a brilliant man, and he has wide experience," Austin remembered. "Momyer is a fast reader; he can read an ordinary book in about 20 minutes and get 80 percent of it." He noted, however, that Momyer did not want a deputy and therefore, Austin lost the sense of responsibility he had under Holloway's leadership. "He took it all unto himself, and he had the capability to handle it."<sup>67</sup>

In April of 1962, McNamara directed the Army to come up with a concept for the future of Army aviation. Headed by Lieutenant General Hamilton Howze, the U.S. Army Tactical Mobility Requirements Board found helicopters could be used both to transport troops and as an extension of artillery in support of ground operations. The board also advocated using Mohawk aircraft for close support and Caribou light-transport aircraft for mobility. The Howze Board published their findings in August 1962. Prior to the release of the report, General LeMay created an Air Force Board to look at the results of the Army's investigation.<sup>68</sup> General LeMay called on Lieutenant General Gabriel P. Disosway, who was at the time the Vice Commander of TAC, to chair the Air Force Board. The board, officially called the U.S. Air Force Tactical Air Support Requirements Board, but often referred to as the Disosway Board, consisted of Momyer, four other major generals from major commands, a brigadier general from Pacific Air Forces, and two colonels. The Disosway Board completed their analysis in September 1962 and Secretary of the Air Force Zuckert forwarded it to McNamara.69

Air Force Historian Robert F. Futrell, who was then working at Maxwell Air Force Base, Alabama at the Air Force Historical Division, remembered spending almost an entire night on the phone for the project. Momyer called Futrell from Washington, D.C. to get a large number of historical references to

<sup>66</sup> Catledge Oral History, 31.

Major General Gordon H. Austin Oral History, by Hugh N. Ahmann, 18-20 May 1982,
 p. 233, K239.0512-1325, IRIS No. 1058219, AFHRA.

<sup>68</sup> Futrell, Ideas, Concepts, Doctrine, vol. 2, 181.

<sup>&</sup>lt;sup>69</sup> Report of the Tactical Air Support Requirements Board, 1962, K168.15-80, vol. 1, AFHRA.

strengthen the Air Force case.<sup>70</sup> The report opened with a letter signed by Lieutenant General Disosway which, if not drafted by Momyer for Disosway's signature, at the very least showed a great deal of Momyer's influence. In a little over ten pages, the Disosway Board refuted the findings of the Howze Board with references to lessons learned in both Korea and World War II.

The letter first addressed the importance of economy of effort and responsiveness; best achieved under a centralized, air component commander. While the Army sought to increase responsiveness by forward basing of aircraft, the Disosway Board argued, "responsiveness in reaching assigned targets can best be achieved by having aircraft with high performance." The letter also invoked the lesson Airmen took from North Africa that "parceling of available air units among individual Army commanders is likely to lead to defeat in detail," and cited quotes from Coningham, Eisenhower, and Marshall. While the Army wanted to take control of 'close-in' Close Air Support giving the Air Force distant Close Air Support, the letter posited there really was no difference. In a passage reflecting Momyer's higher, faster ideology, Disosway wrote, the Mohawk, "would suffer the same fate as the Stuka which disappeared from the scenes of combat in World War II when allied fighter-bombers dominated the battle area." In gaining air superiority, the Army board proposed that air assault operations could conduct air-to-air combat with organic aircraft. In the view of the Air Force board, "it is surprising that the Army Board believes this responsibility should be organic to ground forces in view of the recognized performance of the USAF in World War II and Korea."71

A future TAC Commander remembered his experiences with Momyer during this time. General Wilbur L. Creech, then a lieutenant colonel, was General Sweeney's Executive Officer at TAC during the time Momyer was on the Air Staff. He remembered General LeMay formed a "special 17-general 'guru group,' headed by Sweeney, in addition to the Disosway board, to hammer out the Air Force position on the matter." As Sweeney's executive officer, Creech sat in on the group's meetings. "Momyer was a member as the Requirements two-star guy on the Air Staff," Creech recalled. "He would get up at the

<sup>70</sup> Robert F. Futrell Oral History, July 1995, K239.0512-2135, IRIS No. 00143651, AFHRA

<sup>71</sup> Report of the Tactical Air Support Requirements Board, 1-7.

meetings and pontificate endlessly. When everybody else was fighting to see how we could hold on to our part of tactical aviation, 'Spike' Momyer wanted to roll the dice and go for all of it--win or lose." Creech recalled that Momyer and Sweeney went head to head on their beliefs and "it takes an extremely tenacious two-star to pick an argument with a four-star and get nose to nose with him as a Pentagon two-star, but Momyer would do that with Sweeney."<sup>72</sup>

The group of 17 generals met in Florida to discuss the Air Force response to the Howze findings. Creech believed that Momyer and a group of other generals were fighting for the position of "Aviation for the Aviators." They felt the Air Force should not waiver on its commitment to maintain ownership of all aviation assets, including Army helicopters and light cargo aircraft. According to General Creech, Sweeney allowed Creech to present the TAC position wherein the Army would retain control of their helicopters. General Creech firmly believed that if the Air Force had advocated Momyer's hard line stance, the Air Force would have lost all control of tactical airpower. As much as General Creech felt that Momyer's position was misguided, he admired his strength of convictions and personality. "Momyer took the role he did in the Howze Board bust-up through the force of his personality. He is very articulate. He was no more powerful than any other two-star in that 17-member committee; just more opinionated and forceful about it, and he would take on those who disagreed with him, so I admired him for that. He had the courage of his convictions." 73

The Disosway Board report also addressed counterinsurgency warfare. Since the Army believed counterinsurgency was a land-centric endeavor, the Howze Board had reached the conclusion "that the Army should be charged with the air aspects of counterinsurgency tasks." Further, "the relationship of air support requirements to unified and combined operations in counterinsurgency are the same as in the higher intensities of warfare." According to the Disosway Board report, the Army felt the counterinsurgency missions of reconnaissance, surveillance, target acquisition, fire power, mobility, command and control, and logistical support represented 'Army type aviation' missions. The Jungle Jim organization was capable of performing all

<sup>&</sup>lt;sup>72</sup> General Wilbur L. Creech Oral History, by Hugh N. Ahmann, June 1992, p. 78, K239.0512-2050, IRIS No. 1114823, AFHRA.

<sup>&</sup>lt;sup>73</sup> Creech Oral History, 78 - 82.

these tasks and "all first line tactical fighters / reconnaissance organizations, both in the CONUS and overseas, can be considered as a backup force for counterinsurgency operations."<sup>74</sup>

The Disosway Board report addressed Air Force support for counterinsurgencies in three general phases of intensity. Phase I was characterized by the recognition of a "potential insurgency area," and a corresponding military assistance program to strengthen "the indigenous nation's military capability to combat insurgency directly." In Phase II, the effort increased to operational assistance to include not only personnel and equipment but United States military forces operating with friendly forces. In this phase, the Air Force continued their training roles but conducted training against "actual Communist targets." The report noted that an escalation of the conflict in Phase III, "may call for the operational employment of tactical U.S. forces against the insurgent forces." For Phase III, the report recommended the Air Force maintain an adequate number of units specifically oriented to the conduct of counterinsurgency operations. In addition to these counterinsurgency units, "tactical air units with a primary mission other than counterinsurgency warfare must be prepared to conduct operations in support of counterinsurgency warfare operations." Further, all efforts must be directed "toward the continuous development of general purpose forces with maximum versatility for employment not only in counterinsurgency operations, but also at higher levels of conflict."75

Although the Air Force recognized the validity of preparing for counterinsurgency warfare, it did so in a manner that still held firm to the notion that general purpose forces could also fight a counterinsurgency conflict. By some measures, this belief was essential: the Air Force had to find commonalities in capabilities so as to be prepared to fight across the spectrum of warfare. But by other measures, it showed how Momyer and other Air Force leaders continued to use the lessons learned in previous conflicts to shape the way they would fight in future conflicts, even if the nature of future conflict was

<sup>74</sup> Report of the Tactical Air Support Requirements Board, Annex J, 9-23.

<sup>&</sup>lt;sup>75</sup> Report of the Tactical Air Support Requirements Board, Annex J, 49-51.

different. The challenge for Momyer was to adapt the lessons of past wars to present, dissimilar circumstances.

To see the Air Force's counterinsurgency efforts in action, Momyer traveled to Vietnam in early January 1963 with a bevy of senior officers, including General Earle Wheeler, the Army Chief of Staff, Major General Victor Brute' Krulak, a Marine and the Special Assistant for Counter Insurgency Activities to the JCS, Brigadier General Norman Anderson, the Deputy Chief of Staff (Air) for the Marine Corps, Air Force Lieutenant General David A. Burchinal, the Deputy Chief of Staff for Plans and Programs, and Lieutenant General Disosway, now the Deputy Chief of Staff for Operations. The mission of the group was "to form a military judgment as to the prospects for a successful conclusion of the conflict with a reasonable period of time." Upon their return to the United States, the team wrote a report on their observations. General Disosway recalled:

We thought they ought to get some airfields over there that could handle jet airplanes. . . . we said first that the war was going to get worse and that they ought to get some jet airfields in there so they could handle modern aircraft. . . . The Army controlled the thing completely. We only had the Ranch Hand outfit over there in Bien Hoa, and they weren't included in the fighting except every now and then. I mean it was just everybody going in different directions. We thought the setup over there was very bad. Mr. McNamara was going to bring home by Christmas, you remember, 1,200 troops, which he did, and we said that was wrong, if we were going to do it, we ought to do it properly and get it over with.<sup>78</sup>

Since Farm Gate's arrival in Vietnam, the squadron had not only increased in size and aircraft, but had also began flying large numbers of sorties in both close air support and interdiction attacks against the Viet Cong. As the commander of Detachment 2 of the 1st Air Commando Group at Bien Hoa put it, the "Commando's are not doing their mission out here. What they are doing

150

<sup>&</sup>lt;sup>76</sup> Oral History Transcript, Major General Norman J. Anderson, U.S. Marine Corps (Retired), Benis M. Frank, Interviewer, History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C., 1983,165.

<sup>&</sup>lt;sup>77</sup> Futrell, The Advisory Years, 161, 309n33.

<sup>&</sup>lt;sup>78</sup> Disosway Oral History, 203.

is augmenting the Vietnamese in their tactical air operations."<sup>79</sup> With this increase in operations, Army aviation assets also began to fly a large number of missions in country and a doctrinal dispute erupted over the proper methods of both the employment and the command and control of airpower.<sup>80</sup>

After spending time with Anderson on the trip, Momyer decided it might be beneficial to determine commonalities between Air Force and Marine tactical aircraft. This could prove beneficial in the budget battles, as common platforms brought a level of efficiency to defense procurement. As Anderson remembered, "it was pretty apparent that Spike's idea here was to see if the Marine Corps couldn't be weaned away from the Navy with regard to some aircraft, at any rate."<sup>81</sup> However, the aircraft Momyer was proposing, in particular the F-5, were not carrier friendly, and Anderson could not lend his support. "My later encounters with Momyer," Anderson recalled, "were considerably colored by the experience of his attempting to wean us away from the basic, fundamental idea of being a carrier-suitable force."<sup>82</sup>

Back home, proposals for a multi-purpose aircraft consumed a great amount of Momyer's time. Code-named TFX and eventually birthed as the F-111, the plane was to be a tactical fighter that could meet the requirements of not only the Air Force, but also the Navy and Marines. Therefore, the platform had to meet the full gamut of requirements from the delivery of nuclear weapons to intercepts and engagement of enemy aircraft. During the debate over the aircraft, Momyer visited Congress a number of times to testify. According to Futrell, "Momyer enthusiastically described the TFX as an aircraft with characteristics that would make it suitable for the gamut of war running from counterinsurgency to general conflict." In one testimony, Momyer stated, "When you consider in this tactical fighter we will be doing all the jobs that in World War II we did with B-17s, B-24s, B-26s, P-51s, and P-47s and you look

-

 $<sup>^{79}</sup>$  Lieutenant Colonel M.M. Doyle Oral History, 16 February 1963, p. 24, K239.0512-269, IRIS No. 0090485, AFHRA.

<sup>80</sup> Futrell, The Advisory Years, 136-140.

<sup>&</sup>lt;sup>81</sup> Oral History Transcript, Major General Norman J. Anderson, U.S. Marine Corps (Retired), Benis M. Frank, Interviewer, History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C., 1983,165.

<sup>&</sup>lt;sup>82</sup> Oral History Transcript, Major General Norman J. Anderson, U.S. Marine Corps (Retired), Benis M. Frank, Interviewer, History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C., 1983,166.

at this machine in terms of this kind of flexibility, I think the state-of –the-art has come a long way in enhancing our tactical ability."83 Although history does not smile upon the belief that the TFX could accomplish all of the roles Momyer thought it would, there was more to the selection than just finding the best airplane. General Jacob E. Smart, who worked with Momyer at TAC in 1960, recalled, "the high costs of research, development, testing, evaluating, constructing, and logistically supporting every aircraft system recommends and, at times, requires multipurpose aircraft. Assessment of foreseen operational requirements and economic and political realities led Everest, Momyer, and others to advocate development of multi-mission capability machines."84

In the early summer of 1964, Momyer began to get indications his next assignment would take him to San Antonio, Texas. Lieutenant General Robert W. Burns, the commander of Air Training Command (ATC), had applied for medical retirement and Momyer was selected as his replacement. Reflecting back on his time with Momyer on the Air Staff, General Disosway later remarked, "Spike is so fast and so smart and knows so much that he could do the work of ten people and I'd keep telling him, I'd say, Spike, that's not the idea. I said, you're up here for two purposes; one is to train officers and the other is to get work done, but it doesn't do any good if you do all the work. . . . I said, you've got to train the other fellow to take over some day. But it was much easier for Spike to do it all himself."85 The hard working Momyer had undoubtedly left his mark on the Air Staff.

Momyer left the Air Staff at a time when President Kennedy was focusing the nation's attention on limited war. At the same time, Airmen of strategic ilk, the LeMay Airmen, were reaching their height of influence in the Air Force. Sweeney's command of TAC was illustrative of this influence. A command that had been the home of fighter and pursuit pilots was now led by a bomber pilot.

<sup>83</sup> Futrell, *Ideas, Concepts, Doctrine*, vol. 2, 199-204; Momyer as quoted in Futrell, *Ideas, Concepts, Doctrine*, vol. 2, 204.

<sup>&</sup>lt;sup>84</sup> General Jacob E. Smart Oral History, by Lieutenant Colonel Arthur W. McCants and Dr. James C. Hasdorff, 27-30 November 1978, p. 247, K239.0512-1108, IRIS No. 1041988, AFHRA.

<sup>&</sup>lt;sup>85</sup> General Gabriel P. Disosway Oral History, by Dr. Edgar F. Puryear, Jr., 17 January 1979, p. 8, K239.0512-1401, IRIS No. 01053206, AFHRA.

Momyer's placement as the Director of Operational Requirements on LeMay's Air Staff made him one of the most highly placed of the tactical Airmen. This provided yet another springboard for future assignments, but more importantly placed him at the forefront of the development of capabilities to meet the intent of President Kennedy's preparation guidance for the United States military. Although timing made his position important, Momyer's belief that higher and faster was always better, the courage of his convictions, and the strength of his personality made him a key player in influencing the conceptual foundations for the Air Force that would fight in Vietnam while also leaving him conveniently perched to take on the role of a lead Airman in the nation's growing conflict.

General Momyer donned the third star of a lieutenant general and assumed command of ATC on September 8, 1964. His placement at ATC recognized not only his previous performance, but also his enormous continued potential. The ATC historian's account of Momyer's arrival at Randolph is full of insight and characteristic of Momyer's leadership:

With General Momyer's arrival there began a period of vigorous leadership that influenced all of ATC. Penetrating questions were being asked and intensive studies made covering a great range of subjects. The commander's objectives were clear. He desired to improve ATC's image, internally and externally. He wanted the command to concentrate on quality even if quantity had to be reduced. Way of cutting costs had to be sought, for the money strings were being tightened. Marginal courses were being scrutinized and efforts made to appraise the validity of training requirements. ATC facilities and the quality, use, and appearance of training equipment had to be improved.<sup>86</sup>

As the ATC Commander, Momyer led 22 major activities including the US Air Force Recruiting Service, 1st Military Training Center, 8 pilot training wings, two flying training wings, two navigator wings, and five technical training centers. With the conflict in Vietnam heating up, demand for production at the Air Force's training command increased almost by the day.<sup>87</sup>

Momyer was back at Randolph, where it all started for him in 1938. This time, he got to enjoy his tour in San Antonio with his bride. He and Pat now lived footsteps away from the 'Taj Mahal.' The Commanding General's Quarters

153

<sup>86</sup> ATC History, Volume 1, K220.01, Jul-Dec 64, IRIS No. 0477280, AFHRA.

<sup>87</sup> ATC History, Volume 1, K220.01, Jul-Dec 64, IRIS No. 0477280, AFHRA.

was the largest single-family dwelling constructed at Randolph Field. In 1938, when Momyer started flying training, the home was just seven years old and occupied by Brigadier General James E. Chaney, the Commanding General of the Air Corps Training Center. Flying Cadet William Momyer could never have imagined himself as a resident in Chaney's former home. Twenty-eight years later, Lieutenant General and Mrs. Momyer entertained their guests in Building 300.

Brigadier General Kenneth R. Johnson, who was a staff maintenance officer at ATC during Momyer's tenure, remembered his experiences with Momyer in San Antonio. "He's absolutely brilliant," Johnson recalled. "He's tough as nails. He reads about thirteen hundred words a minute and he's got a recall that's like an iron mousetrap." Johnson was responsible for briefing Momyer on ATC maintenance issues each day. "That was a real challenge. I used to sit up at nights figuring out how I was going to brief him on some of the tougher things." He soon learned to prepare for the tough briefs. "I'd carry in my board and I'd have a special briefing on the back of it. Whenever he'd hit me on that point, I'd flip my board around and give him that briefing. One day I went in there and we finished the briefing and I didn't even get caught on anything. He said, 'What did I miss?' I said, 'You didn't miss anything,' and he said, 'Turn your board around.""88

Momyer's time at Randolph was short lived. According to the ATC history, "intermittently since his assignment as commander on 11 August 1964, headquarters personnel had heard rumors indicating he would soon leave ATC." In May 1966, Momyer learned he would assume duties as Deputy Commander, Military Assistance Command Vietnam (MACV) for Air Operations, and Commander, Seventh Air Force on July 1, 1966. For a dozen years Momyer had been waiting for such a call. Little did he know he would soon face the impact of some of the decisions he made in those twelve years. He left the states a man seasoned by combat, educated in airpower theory, practiced in

<sup>&</sup>lt;sup>88</sup> Brigadier General Kenneth R. Johnson Oral History, by Hugh N. Ahmann, 18 September 1988, p. 29, K239.0512-1842, IRIS No. 1125014, AFHRA.

high end conflict, and rehearsed in doctrinal battles. Momyer would need every skill set gained as he left Randolph in June of 1966 - bound for the Pacific.<sup>89</sup>

-

 $<sup>^{89}</sup>$  ATC History, Volume 1, K220.01, Jul-Dec 64, IRIS No. 0477280, Jan-Jun 65, IRIS No. 0477296, Jan-Jun 66, IRIS No. 047737, AFHRA.

## Chapter 8

## A Theater Amiss

The first twenty-eight years of Momyer's career served as preparation for his assignment in Vietnam. Finally, as the Seventh Air Force Commander, Momyer commanded airpower in war. For a man who had spent his life envisioning the perfect conception of a theater command, however, the set up in Vietnam fell far short of his ideal. The command arrangements in the theater in 1966 were complex and convoluted, a circumstance that bedeviled Momyer and undercut the effective use of American military force.

On June 30, 1966, Momyer emerged from the passenger door of a Boeing C-135 on the tarmac at Tan Son Nhut Air Base. It was a hot and humid, bright blue sky day in Saigon as Momyer briefly stood at the top of the crew stairs. At the bottom of the crew stairs stood Lieutenant General Joseph Moore, who was just a wake up away from finishing his tour as the Deputy Commander for Air for the Military Assistance Command Vietnam (MACV) and the Commander of Seventh Air Force. Momyer quickly made his way down the stairs, rendered a greeting, and the two walked between the rows of the white-uniformed personnel of the base honor guard.<sup>1</sup>

Moore was finishing a two and a half year tour in Vietnam. When he started the job in January of 1964, Seventh Air Force did not exist. At that time, the organization was known as the 2nd Air Division and its growth over the years demanded an upgrade to a numbered Air Force. Like Momyer, Moore was a career TAC man and had served as the assistant deputy for operations on the TAC staff. Moore was also a boyhood friend of the man he worked for in Vietnam, General William Childs Westmoreland, the Commander of Military Assistance Command, Vietnam (MACV). On the first night in theater, Momyer dined with Moore and Westmoreland at the Seventh Air Force Commander's quarters in downtown Saigon.<sup>2</sup>

Westmoreland and Momyer had much in common. Westmoreland had come to shore with Momyer in North Africa in 1942 with Operation Torch. He

<sup>&</sup>lt;sup>1</sup> Video Recording No. 342-USAF-40988; "600th Photo Squadron Cameramen in Action, Tan Son Nhut Air Base" July 30 – August 1, 1966; Records of the U.S. Air Force, Record Group 342; National Archives at College Park, College Park, MD.

<sup>&</sup>lt;sup>2</sup> William C. Westmoreland Papers, Folder #7, History Files: 29 May -16 Jul 1966, Center of Military History.

was the commander of the 34th Field Artillery Battalion of the 9th Infantry Division and fought across Tunisia and into Sicily while Momyer battled in the skies above. Westmoreland fought battles across Europe until victory was declared over Hitler's forces. Since then, Westmoreland had spent time as an instructor in Army schools at both Fort Leavenworth and Carlisle Barracks, and then went to Korea as the wartime commander of the 187th Airborne Regimental Team. After Korea, Westmoreland spent nearly four and a half years at the Pentagon on the Army staff, commanded the 101st Airborne Division, served as the Superintendent at West Point, and commanded the XVIII Airborne Corps before assuming command of MACV in August of 1964.<sup>3</sup>

Westmoreland and Moore were proud of their accomplishments at MACV. The Air Force had often been tough on Moore for a perceived reluctance to push an airpower 'agenda.' The use and control of airpower at MACV had been far from what other Air Force senior leaders might call ideal. General Paul Harkins, who was Westmoreland's predecessor at MACV, had supported and often encouraged the build-up of fixed wing Army aviation in theater and parceled out control of aviation assets to ground units. There "is no air battle in Vietnam, and there are no indications that one will develop," Harkins had claimed, but there was an "extensive utilization of air power in support of the ground battle."<sup>4</sup>

This was the legacy Moore and Westmoreland had inherited when they arrived in theater. During their tour together, the arming of Army helicopters had particularly annoyed General LeMay, the Air Force Chief of Staff. Shortly after Westmoreland took command, LeMay confronted him on a trip to Washington, D.C. In Westmoreland's words, LeMay "upbraided me about the way I was using air power." Because he was the senior Airman in Vietnam, Moore also received the wrath of LeMay. He called Moore to Hong Kong and as Westmoreland remembered, "Moore got a terrible tongue-lashing from LeMay

<sup>3</sup> Lewis Sorley, Westmoreland: The General Who Lost Vietnam (Houghton Mifflin Harcourt, New York, 2011), 1-65.

<sup>5</sup> A Soldier Reports, 103-104.

<sup>&</sup>lt;sup>4</sup> As quoted in Graham A. Cosmas, *MACV: The Joint Command in the Years of Escalation*, 1962-1967 (Center of Military History, United States Army, 2006), 59.

because he wasn't pushing the Air Force role enough."<sup>6</sup> As Westmoreland fondly looked back on Moore's time in Vietnam on the eve of the change of command, he wrote, "we have had a very satisfying and warm relationship during two and one-half years in Vietnam." Moore had "tailored his organization and procedures to the requirements on the ground and has not been bound by doctrine developed based on experiences of other wars."<sup>7</sup>

Undoubtedly, Momyer was eating dinner with Moore and Westmoreland precisely because the Air Force believed he was a man well versed in doctrine and capable of asserting airpower's proper role in Vietnam. One of Momyer's long-time mentors, retired Lieutenant General Elwood Quesada, highlighted Momyer's qualifications to Air Force leaders. Upon returning from a trip to Vietnam in 1965, the retired Quesada recommended Momyer become the next Seventh Air Force commander, because he "understands the use of air power and doesn't give a goddamn about getting along." Momyer would soon see just how important getting along could be.

This was a moment for which Momyer had prepared his whole career. Now, as he sat across from General Westmoreland at dinner, the dream became reality. As the United States MACV commander, or COMUSMACV, Westmoreland led a subordinate unified command and reported directly to Admiral Ulysses Simpson Grant Sharp, Jr., known more often by his title, CINCPAC (Commander in Chief, Pacific). In this arrangement, instead of reporting directly to the Joint Chiefs of Staff (JCS), Westmoreland reported to Sharp, who then reported to the JCS. In practice, Westmoreland often conversed directly with the Chairman of the JCS, but included Sharp on all correspondence.

This arrangement had its origin in the founding of MACV, and in many ways was a result of the incremental build-up that characterized the United States involvement in Vietnam. In late 1961, the JCS had agreed with

William C. Westmoreland Papers, Folder #7, History Files: 29 May -16 Jul 1966, Center of Military History.

<sup>&</sup>lt;sup>6</sup> Westmoreland Interview File, March 6, 1971, Paul L. Miles Papers, Box 1, Army Military History Institute, p. 16.

<sup>&</sup>lt;sup>8</sup> Richard H. Kohn and Joseph P. Harahan, ed., Air Superiority in World War II and Korea: An Interview with Gen. James Ferguson, Gen. Robert M. Lee, Gen. William Momyer, and Lt. Gen. Elwood R. Quesada (Washington, DC: Office of Air Force History, 1983), 70.

CINCPAC's assessment that the number of American forces to be deployed to Vietnam did not justify a theater command. The Navy, as the dominant service in the Pacific, led the effort and argued Vietnam could not be strategically separated from the rest of Southeast Asia.<sup>9</sup> Not surprisingly, Momyer was not a fan of this arrangement. "The Army and Air Force believed," he later recalled, "that a theater unified command would be needed and that it should report to the Joint Chiefs of Staff as the Far East Command did in the Korean War."10 Momyer felt "experience in World War II and Korea indicated the need to place control close to the scene of action."11 Once again illustrating the impact of Momyer's experiences in World War II, he wrote, "A sub unified command was no more appropriate for Southeast Asia than the Mediterranean theater of operations would have been as a sub unified command of SHAEF [Supreme Headquarters Allied Expeditionary Force - the headquarters of allied forces in northwest Europe]."12 Westmoreland's World War II experience also came to light in his description of the arrangement. "What many failed to realize was that not I but Sharp was the theater commander in the sense that General Eisenhower, for example, was a theater commander in World War II."13 Sharp saw no issues with the arrangement. Although there were numerous attempts to upgrade MACV to a unified command reporting directly to the Joint Chiefs, Sharp remembered, "we wrote many messages pointing out the reasons why such an arrangement was not a good idea, and finally the idea more or less died out."14

On the morning after the dinner, July 1, 1966, Momyer assumed command of the Seventh Air Force. Westmoreland presided over the ceremony primarily because one of Momyer's many roles in South Vietnam was the

<sup>&</sup>lt;sup>9</sup> Graham A. Cosmas, *MACV: The Joint Command in the Years of Escalation, 1962-1967* (Center of Military History, United States Army, 2006), 38.

<sup>&</sup>lt;sup>10</sup> Airpower in Three Wars, 77.

<sup>&</sup>lt;sup>11</sup> Airpower in Three Wars, 85.

<sup>&</sup>lt;sup>12</sup> General Momyer to General Ellis, Vice Chief of Staff, HQ/USAF, Memorandum, Subject: Corona Harvest (Command and Control of Southeast Asia Operations, 1 January 1965 - 31 March 1968), 18 July 1974, 168.7041-113, 65/01/01 - 68/03/31, Momyer Papers, AFHRA.

<sup>&</sup>lt;sup>13</sup> A Soldier Reports, 91.

<sup>14 &</sup>quot;Reminiscences of Admiral U. S. Grant Sharp, U. S. Navy (Retired), Volume I,"
interviewed by Commander Etta Belle Kitchen, U. S. Navy (Retired), 20 September 1969
7 June 1970, 246.

Deputy Commander, USMACV, for Air. Much like the Seventh Air Force organization, the Deputy Commander for Air position was relatively new and without firm footing in joint doctrine or past practice. Since the founding of MACV, Airmen had argued for Westmoreland to have an Airman as a Deputy Commander, not just a Deputy Commander for Air. Momyer later remembered Westmoreland believed "the major task in South Vietnam was the ground battle and that he needed a soldier as his deputy to help share the burden." As Westmoreland himself asked, "why place an air officer in a position where he might have to run what was essentially a ground war?" In June of 1965, the JCS sided with Westmoreland and established the Deputy Commander for Air position.

Westmoreland defined the role of the air deputy. The position was to provide timely advice and recommendations upon which Westmoreland could form judgments and make decisions on matters relating to air operations. In this role, Momyer was also to synchronize the air activities of forces under Westmoreland's command and coordinate all of those activities with the Vietnamese Air Force. If Momyer was hired because he did not care about getting along, his last formal responsibility was to be his biggest challenge. He was to promote "a high order of esprit, teamwork, and efficiency among the air elements of the U.S. services assigned to MACV."17

"In a theoretical sense," Momyer later recalled, "a Deputy Commander for Air is a superfluous office since it has no command authority and no direct operating responsibilities." For this specific responsibility, Momyer had no staff, and therefore, believed he had "no real means of discharging its constituted duties." On many occasions during his tour, Momyer called for the position to be eliminated, but as he once awkwardly put it, these recommendations were "not favorably considered for reasons not stipulated." 19

<sup>&</sup>lt;sup>15</sup> Airpower in Three Wars, 91.

<sup>&</sup>lt;sup>16</sup> A Soldier Reports, 90.

<sup>&</sup>lt;sup>17</sup> Westmoreland's direction as quoted in "Command and Control, 1966-1968," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 1 August 1969, 15.

<sup>&</sup>lt;sup>18</sup> General William Momyer, End of Tour Report, K740.131, IRIS# 00524451, AFHRA, November 1970, 6.

<sup>&</sup>lt;sup>19</sup> General William Momyer, End of Tour Report, K740.131, IRIS# 00524451, AFHRA, November 1970, 6.

Momyer's position as the Seventh Air Force commander overlaid his position as a deputy commander. For air operations in South Vietnam and the southernmost part of North Vietnam, Momyer worked for Westmoreland as the air component commander. In this capacity, Momyer not only controlled sorties for close air support of the ground battle, but also for interdiction of North Vietnamese supply lines within South Vietnam, the southernmost part of North Vietnam, and Laos. Momyer commanded all Air Force assets located within South Vietnam to accomplish this mission.

Momyer's command over Air Force assets in South Vietnam was the most clear-cut of his responsibilities. Others were complex and contentious. South Vietnam was divided into four tactical zones by the Army of the Republic of Vietnam (ARVN) corps which had responsibility for that particular area. In kind, MACV designated its forces for primary responsibility in three of these corps areas. I Field Forces, Vietnam (FFV) had responsibility for the II Corps area, the twelve provinces of the Central Highlands. II FFV had responsibility for III Corps area, the eleven provinces surrounding Saigon. Both FFV's were Army corps level commands commanded by three star generals. The furthest north area in South Vietnam, containing the provinces closest to the demilitarized zone (DMZ) was I Corps, or 'Marine Land.'

The III Marine Amphibious Force (MAF) had responsibility for I Corps. Their presence there dated back to early 1965. In February of 1965, Communist guerrilla forces of the Viet Cong attacked the United States airbase at Pleiku, South Vietnam. Nine Americans were killed and hundreds of aircraft were damaged or destroyed. The action prompted the first Rolling Thunder air strike on North Vietnam. Recognizing the need for increased airbase security, President Johnson ordered the deployment of a two-battalion Marine expeditionary brigade to South Vietnam. Almost ironically, Momyer and others believed this was the way ground troops would be introduced in an atomic war, defending the bases of the aircraft delivering the ordnance to enemy targets. This was a very different war, but it escalated in a way not unlike the conceptual foundations of land power in an atomic war.

On March 8, 1965, the first of 5,000 Marines of the 9th Marine Expeditionary Brigade had walked ashore on the beach near the American base at Da Nang. By the time Momyer arrived in Vietnam, the mission of the Marines had escalated well beyond airbase defense. In 1966, the III MAF extended over all of I Corps, was over 41,000 Marines strong, and consisted of the 3d Marine Division, the 1st Marine Air Wing (MAW), and supporting units. At the beginning of 1966, the 1st MAW had eight helicopter squadrons and eight fixed-wing squadrons in South Vietnam.<sup>20</sup>

The III MAF believed the Marine air-ground team was the ideal solution for close air support in I Corps. For the Marines, the air-ground team was religion, victory, and survival all rolled into one. During the conflict in Korea, the Fifth Air Force had gained operational control of all Korea-based Marine aircraft. At that time, the Fifth Air Force argued it needed control of Marine aviation to facilitate the interdiction campaign. The wish was granted, and not long after institution of the system, Marines began to have serious reservations about the quantity and timeliness of the close air support.<sup>21</sup> This situation was a lesson the Marines did not forget. When asked if being under Air Force operational control would be a threat to the Marine Corps, one senior officer replied, "Yes, in terms of getting us back to where we were in Korea, the wing under an Air Force commander and the ground under somebody else."22 For Momyer, of course, the control of Marine aviation by a senior Air Force officer was only natural. "As a result of the integration of Marine air operations with 5th Air Force operations," he later wrote looking back on Korea, "centralized control of all the Airpower assigned to the Far East Theater of operation provided the flexibility that it did in the campaigns of World War II."23

The rapid buildup of Marine aviation in Vietnam had required coordination. In 1965, Moore and Brigadier General Keith B. McCutcheon, then the 1st MAW commander, under direction of Sharp and Westmoreland, laid the ground-work for the relationships between the two organizations.

<sup>&</sup>lt;sup>20</sup> Jack Shulimson, *U.S. Marines in Vietnam, An Expanding War, 1966* (History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C., 1982), 261-266.

<sup>&</sup>lt;sup>21</sup> Charles R. Smith, editor, *U.S. Marines in the Korean War* (History Division, United States Marine Corps, Washington, D.C., 2007), 398-403.

<sup>&</sup>lt;sup>22</sup> Benis M. Frank, Interviewer, *General Robert E. Cushman, Jr., U.S. Marine Corps* (*Retired*), *Oral History Transcript* (History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C., 1984), 65.

<sup>&</sup>lt;sup>23</sup> Airpower in Three Wars, 70.

McCutcheon, a leader who knew Marine air support doctrine the way Momyer knew Air Force doctrine, was the PACOM assistant chief of staff for operations before he arrived in Vietnam. During his tour in Hawaii, McCutcheon spearheaded a joint service board to develop the procedures for tactical air support in the PACOM area of responsibility. As McCutcheon later wrote, "Admiral H. D. Felt, who was CINCPAC in the early sixties, had studied the lessons of the Korean War and concluded that we needed to do better . . . since there was no doctrine upon which all the Services were agreed on that score, he decided to form a board to look into the matter."<sup>24</sup> After deliberation, the board's report concluded each service with an air element should retain command and control of that element when operating as part of a joint force. The commander of the joint force was to exercise operational control of the separate air elements through the service component commanders. One of those service component commanders was to be designated as the overall coordinating authority for tactical air. When Sharp established the initial tactical air support arrangements in April 1965, he followed the board recommendations almost to the letter.<sup>25</sup>

Under Sharp's directive, McCutcheon's A-6, F-4, A-4, and F-8 fighter and attack aircraft operated under III MAF operational control for close air support in I Corps. Moore had only coordination authority in support of I Corps ground operations. Once McCutcheon allocated sorties to fulfill requests from Marine ground units, he informed Moore of any excess capacity available for employment to support other forces or other missions. In July 1965, Westmoreland signed MACV directive 95-4, formalizing these arrangements for the joint command. The directive had one caveat. In the event of a major emergency or disaster, Westmoreland had the authority to direct Moore to assume operational control of Marine aviation assets. In follow-on discussions, Moore attempted to gain operational control of Marine aviation for the air defense of South Vietnam mission. McCutcheon successfully stiff-armed complete control but did allocate alert scrambles, target planning, and air

<sup>&</sup>lt;sup>24</sup> Lieutenant General Keith B. McCutcheon, U.S. Marine Corps, "Marine Aviation in Vietnam, 1962-1970," *Proceedings*, May 1971, 175.

<sup>&</sup>lt;sup>25</sup> Graham A. Cosmas, *MACV: The Joint Command in the Years of Escalation, 1962-1967* (Center of Military History, United States Army, Washington, D.C., 2006), 328.

defense missile status determinations to Moore. The two signed a memorandum in August 1965 to formalize the agreement.<sup>26</sup>

While Momyer commanded most air assets in South Vietnam and coordinated the rest through arrangements with the Marine Corps, he had operational control of Air Force assets based in Thailand. In 1966, the definition of operational control was "those functions of command involving the composition of assigned forces, the assignment of tasks, the designation of objectives and the authoritative direction necessary to accomplish the mission."27 Thirteenth Air Force, based in the Philippines, had command of the units in Thailand. In order to satisfy a Thai government request to have units in Thailand under the direction of a commander who resided in that country, the Air Force designated a Deputy Commander, 7th Air Force/13th Air Force. This deputy had administrative responsibility for the forces while Momyer held the responsibility to assign them to combat missions. Brigadier General Robin Olds, the son of Colonel Robert Olds from Momyer's days at Langley before World War II, was a wing commander at Ubon Royal Thai Air Force Base during this period. "In its simplest sense," Olds remembered, "Thirteenth Air Force was beans, buildings, blankets . . . Seventh Air Force was bullets." The deputy commander, Olds recalled, was "the military contact for the ambassador in Bangkok."28

In ways never before seen, the ambassadors throughout the region played a major role in the conflict. "Since the ambassador in Thailand was responsible for all activities of U.S. forces based there," Momyer later wrote, "he requested a daily report of missions flown by units in Thailand." Importantly, though, "the ambassador in Thailand exercised no control over the operations of the force." His role was purely advisory to "keep the Thai government informed on the air war and to obtain facilities needed for basing our forces." 29

<sup>&</sup>lt;sup>26</sup> Lieutenant General Keith B. McCutcheon, U.S. Marine Corps, "Marine Aviation in Vietnam, 1962-1970," *Proceedings*, May 1971, 175.

<sup>&</sup>lt;sup>27</sup> "Definition of Operational Command and Operational Control," Historical Division, Joint Secretariat, Joint Chiefs of Staff, 30 April 1975, 20.

<sup>&</sup>lt;sup>28</sup> Brigadier General Robin Olds Oral History, by Major Geffen and Major Folkman, 2-3, K239.0512-051, AFHRA.

<sup>&</sup>lt;sup>29</sup> Airpower in Three Wars, 96.

The ambassador in Laos was another story. The recent United States involvement in Laos dated back to 1955 when President Eisenhower had begun supporting the government forces fighting the communist insurgents in that country. Although the Geneva Accords prohibited a pure military mission in Laos, the United States began a covert operation to organize, train, and equip the forces fighting to keep Laos out of communist hands. At the end of 1960, the conflict boiled over. Backed by the artillery and forces of the North Vietnamese and a massive Soviet airlift supply effort, a coalition of Neutralists and Communist Pathet Lao campaigned against the Royal Lao Army, also called the Forces Armee Royale (FAR), to take over the country. The United States sent World War II era B-26 bombers to Takhli Air Base in Thailand to support the Royal Laotian Government. In 1961, JFK founded the Military Assistance Advisory Group (MAAG), Laos. After a tenuous cease fire in May of 1961, Kennedy disbanded the MAAG and placed all control of military power, covert and otherwise, under the control of the ambassador in Vientiane. When Momyer took command in 1966, he believed, "the embassy air attaché functioned as an air commander since he could determine 7th Air Force employment through the authority of the ambassador."30

William Healy Sullivan had been in place as the ambassador in Laos since December 1964. A former special assistant to the secretary of state, Sullivan seemed a natural pick for the post since he had been chairman of the state department's Vietnam working group.<sup>31</sup> Coincident with Sullivan's arrival in Laos, LBJ had authorized Operation Barrel Roll, one of the first steps in the United States policy of sending 'signals' to Hanoi. F-100s and F-105s flew the first covert armed reconnaissance missions against North Vietnamese infiltration routes in northern Laos, the famous Ho Chi Minh trail.<sup>32</sup> Barrel Roll later became synonymous with the operational area encompassing northern Laos. "In Barrel Roll," Momyer later wrote, the Royal Lao Army "operated under direct control of the embassy" and "the U.S. air attaché played a major role in

<sup>&</sup>lt;sup>30</sup> Air Power in Three Wars, 96.

<sup>&</sup>lt;sup>31</sup> Victor B. Anthony and Richard R. Sexton, *The United States Air Force in Southeast Asia: The War in Northern Laos*, 1954-1973 (Center for Air Force History, Washington, D.C., 1993), 144.

<sup>&</sup>lt;sup>32</sup> USAF Historical Division Liaison Office, "USAF Plans and Policies in South Vietnam and Laos, 1966," 79.

the embassy staff in selecting targets and proposing the size of forces employed daily." As he took command, Momyer saw the command arrangements in northern Laos as one of his many problem spots. "In essence," he wrote, "the activity sealed off a geographical area, and Airpower was fragmented for that area."33

Momyer thought the situation in southern Laos was a bit better. The two areas designated for aerial interdiction operations of the Ho Chi Minh Trail in that part of the country were code-named Steel Tiger and Tiger Hound. Much like Barrel Roll, Steel Tiger began in April of 1965 as an interdiction campaign to exert pressure on Hanoi to cease support for the insurgency in the south. In December of 1965, Westmoreland sold McNamara on another program to slow the infiltration into the south, and resultant Tiger Hound operations encompassed the areas in Laos nearest the border of the northern-most provinces in South Vietnam.<sup>34</sup> As Momyer recalled, "command of the forces followed prescribed military channels, and the ambassador in Laos could approve or disapprove certain targets."<sup>35</sup>

Despite Momyer's frustrations with the control of airpower in Laos, the country was politically sensitive. The International Agreement on the Neutrality of Laos, signed in July 1962, said no nation could establish a military base on Laotian soil. Although this should have resulted in the withdrawal of any forces in Laos at the time, it did not. The North Vietnamese continued to support the Pathet Lao and continued to use Laos to transport materials to the South. In the open, the United States vowed it was abiding by the neutrality agreement. Covertly, however, it continued involvement in the area, mainly through the Department of State and the Central Intelligence Agency. Sullivan took control over operations in Laos to manage the delicate balance of maintaining the appearance of Laotian neutrality while waging America's 'Secret War' against the communist forces in that nation.<sup>36</sup> To say that Westmoreland and Momyer

<sup>33</sup> Air Power in Three Wars, 98.

<sup>&</sup>lt;sup>34</sup> Jacob Van Staavern, *The United States Air Force in Southeast Asia: Interdiction in Southern Laos*, 1960-1968 (Center for Air Force History, 1993), 56, 98.

<sup>&</sup>lt;sup>35</sup> Airpower in Three Wars, 97.

<sup>&</sup>lt;sup>36</sup> Victor B. Anthony and Richard R. Sexton, *The United States Air Force in Southeast Asia: The War in Northern Laos*, 1954-1973 (Center for Air Force History, Washington, D.C., 1993), 71.

resented Sullivan's control over operations in Laos would be vast understatement. Once, as Westmoreland toured an air base with the American ambassadors to both Thailand and Laos, he quipped to Airmen taking his picture why they would want a photograph "of a general when they can snap two field marshals."<sup>37</sup>

The ambassador in South Vietnam also played a role in the conflict. As Westmoreland later stated, "we had an ambassador who had responsibility by his terms of reference for the political – the basic policy matters, and we had a senior American military commander who was responsible for military matters." Although Westmoreland's responsibilities involved much interaction with the ambassador, Momyer had much less. His main interaction occurred with the Seventh Air Force liaison role with the Vietnam Air Force (VNAF). As the MACV's air component commander, the Seventh Air Force commander had three coordination responsibilities tied to the VNAF - air defense, command and control of strike aircraft, and training for VNAF personnel in the offensive and defensive employment of tactical aircraft. The VNAF was equipped to fight the Viet Cong in South Vietnam and contributed aircraft to the daily sortie allocations.<sup>39</sup>

The nature of the war in South Vietnam put a high demand on airlift resources. Momyer remembered, "upon my assumption of command of 7AF, there was no organization for the control and direction of the airlift force, yet the daily airlift requirement was going up with each new ground unit that was brought into the theater."<sup>40</sup> C-123s were assigned to Thirteenth Air Force but manned by personnel assigned to Seventh Air Force. C-130s were also assigned to Thirteenth Air Force and rotated in to the theater on a recurring basis. When Momyer arrived, the Army owned five squadrons of C-7s. However, the recently signed McConnell-Johnson agreement, a compromise

<sup>&</sup>lt;sup>37</sup> William C. Westmoreland, *A Soldier Reports* (Garden City, New York: Doubleday and Co., 1976), 92.

Transcript, Interview of General W. C. Westmoreland by Major Paul L. Miles, Jr., Fort Myer Virginia, April 10, 1971, p. 1, Paul L. Miles Papers, Oral History with General Westmoreland, Box 1, Military History Institute, Carlisle Barracks, Pennsylvania.
 USAF Historical Division Liaison Office, "USAF Plans and Policies in South Vietnam and Laos, 1966," 67-68.

<sup>&</sup>lt;sup>40</sup> General William Momyer, End of Tour Report, K740.131, IRIS# 00524451, AFHRA, November 1970, 10.

between the Chiefs of the two services, provided for the transfer of these aircraft to the Air Force in January of 1967. Marine units in I Corps also guarded their own KC-130s, causing Momyer to lament, "at the same time Marine requirements for logistical support were totally dependent upon theater airlift to keep them healthy, fed, armed, and ready to fight."<sup>41</sup>

Also contributing to the ground war in South Vietnam were the B-52 strikes of the Arc Light program. Momyer's comment in an Air University document years ago now haunted him. Then, Momyer encouraged his superiors not to include a reference to SAC assets in theater airpower as it would only ruffle LeMay's feathers, and was sure any SAC forces would be placed under the control of theater air manager when the situation called for it. But that did not happen in Vietnam. SAC never relinquished command of bombers dropping ordnance in South Vietnam. Early in 1965, B-52s deployed to Guam and shortly thereafter commenced operations in South Vietnam, striking targets nominated by Westmoreland, but always under the operational control of SAC officers in Omaha, Nebraska. Momyer approved neither MACV's targeting authority for B-52s nor SAC's control of them. "I consider the control and planning of B-52 operations most difficult and contrary to sound management of a theater war," he later wrote. Speaking specifically to SAC's continued command of the B-52 forces, Momyer said, "our doctrine is obsolete in regard to the control of these forces when they are employed exclusively against target systems assigned to a theater commander." Momyer firmly believed "adequate provisions must be made to provide for withdrawal of these forces in the event of a strategic warning." This, he thought, was "only prudent and shouldn't constitute a valid argument against placing them under operational control of the theater air commander."42 Much as it was while Momyer was at Air University, this view was not popular throughout the Air Force. In fact, as General Joseph Nazarro, the man who led SAC through a

 $<sup>^{\</sup>rm 41}$  General William Momyer, End of Tour Report, K740.131, IRIS# 00524451, AFHRA, November 1970, 10.

 $<sup>^{\</sup>rm 42}$  General William Momyer, End of Tour Report, K740.131, IRIS# 00524451, AFHRA, November 1970, 9.

portion of time Momyer was in Vietnam, put it, he and the Air Force Chief of Staff had personally worked out SAC control of the bombers.<sup>43</sup>

To support these operations, SAC also maintained control of the KC-135 tankers required for fighter refueling operations. Much like the B-52s, the tankers supported the theater air mission. They were used primarily to support strike operations in North Vietnam. The F-105s and F-4s from bases in Thailand required fuel before going in to North Vietnam and more fuel coming out of North Vietnam to return to their bases in Thailand.

While Sharp delegated nearly all responsibility for the war in South Vietnam to Westmoreland, he maintained strict control over the air war in North Vietnam. By the time Momyer arrived, air strikes against North Vietnam were already in their second year of operations, having begun first as limited strikes against North Vietnam as retaliation for the Gulf of Tonkin incident, a skirmish between North Vietnamese torpedo boats and destroyers of the United States Navy, and progressing to the very first Rolling Thunder missions, which were piecemeal applications of force against specific targets to attempt to send 'signals' to North Vietnam.

Sharp orchestrated his strict control over Rolling Thunder operations in North Vietnam through his component commanders, the Commander of Pacific Air Forces, CINCPACAF, and the Commander of the Pacific Fleet, CINCPACFLT. Sharp was ten years Momyer's senior. He had commanded destroyers in World War II, served as a planning officer for the Inchon invasion of Korea, commanded the Pacific Fleet, and became CINCPAC in June of 1964. Known by his peers as 'Oley,' he was, in Westmoreland's words, "obviously Navyoriented" but "eschewed parochialism and dealt fairly with all of the services."<sup>44</sup> Put into effect in August of 1964, Sharp firmly believed his construction for control of airpower in North Vietnam "made use of the large and expert staffs of CINCPACAF and CINCPACFLT in doing this important complicated planning, and that coordination between CINCPACFLT and CINCPACAF and my own staff would be facilitated, since we were all based in Honolulu." Since the command

<sup>&</sup>lt;sup>43</sup> General Joseph J. Nazarro Oral History, by Major Scott S. Thompson, 3-6 February 1980, 141-142, K239.0512-1189, IRIS No. 1047757, AFHRA.

<sup>&</sup>lt;sup>44</sup> William C. Westmoreland, *A Soldier Reports* (Garden City, New York: Doubleday and Co., 1976), 91.

arrangements were made when Seventh Air Force was still the Second Air Division and had a much smaller staff, the increasing U.S. presence resulted in numerous requests to readdress the arrangement. Despite these requests, Sharp remembered, the arrangement "stayed essentially the same throughout the war because it became obvious as the war went on that this was the most efficient way to control air power."<sup>45</sup>

Ironically, though the stated political objectives in Vietnam were to support a stable and free government in the South, the commander responsible for the air war in the north was thousands of miles away. According to Momyer, Sharp "believed the organization provided flexibility for concentrating his forces in the Pacific against the Chinese should that contingency develop."46 Whether or not the arrangement would have been effective in that contingency, it left a lot to be desired for the conflict that did exist in 1966. When Sharp received approval for Rolling Thunder targets, he divided those targets between PACAF and PACFLT. In turn, CINCPACAF delegated his targets to Seventh Air Force, while PACFLT delegated his targets to Seventh Fleet, who, in turn, delegated them to Task Force 77 in the Gulf of Tonkin. At any one time Task Force 77 consisted of two to four aircraft carriers and supporting assets. CINCPAC assigned PACAF, and thereby Seventh Air Force, coordinating authority in North Vietnam. The architecture for coordinating authority—itself a murky and malleable term—constituted a mess for those trying to integrate and orchestrate an air campaign in Vietnam.

Coordinating authority was a far cry from operational control. Momyer saw the same lessons he observed in North Korea, while writing doctrine at Air University, applying to Vietnam. PACAF argued, just as FEAF had during Korea, naval air should come under operational control of the air component. "However," Momyer wrote, Sharp believed "naval Airpower was an inherent part of the fleet" and did not grant operational control to PACAF.<sup>47</sup> Momyer "feared that this arrangement would create the same problems it had created in the Korean War; it was not the command relationship needed to adequately direct

-

<sup>45 &</sup>quot;Reminiscences of Admiral U. S. Grant Sharp, U. S. Navy (Retired), Volume I," interviewed by Commander Etta Belle Kitchen, U. S. Navy (Retired), 20 September 1969 – 7 June 1970, 245.

<sup>&</sup>lt;sup>46</sup> Airpower in Three Wars, 88.

<sup>&</sup>lt;sup>47</sup> Airpower in Three Wars, 102.

both forces to a common objective."<sup>48</sup> Momyer also believed "by law, there should never have been an argument about the Air Component Commander having operational control of the carrier forces engaged in air operations in the theater." Momyer felt the legal basis for air component control of naval air rested in the words of the Unification Act of 1947, since it tasked the Air Force with "the gaining of air superiority and the interdiction of the land battle." Momyer acknowledged the Navy was charged with operations "incident to a naval campaign and the maintenance of air superiority incident to such a campaign," but Momyer believed "the battle in North Vietnam was an air campaign and the interdiction of the LOCs was in direct support of the land battle."

To ease the synchronization between the two forces, CINCPAC formalized coordinating authority with the creation of the Rolling Thunder Coordinating Committee, chaired by the Seventh Air Force commander. Given the command arrangements, the actions of the committee were a necessary procedure. Momyer, however, did not approve of the set-up. The coordinating committee had no power of decision if there was a disagreement between the participants. Instead, the Seventh Air Force commander "could only refer the disagreements to CINCPAC for resolution." Momyer saw the committee as "an elusive means of not placing the carrier strike forces under the operational control of the Air Component Commander, which the combat situation dictated." <sup>50</sup>

CINCPAC directed the coordinating committee to split North Vietnam into six geographical regions, or Route Packs (RP). Momyer called the route package system, "a compromise approach to a tough command and control decision, an approach which, however understandable, inevitably prevented a unified, concentrated air effort."<sup>51</sup> RP1, the furthest south of the areas containing the area just north of the DMZ, was controlled by MACV. RP2, 3, and 4 were under control of Task Force 77, while RP5 was under control of Seventh Air Force. Both services split operations into RP6, the highest threat area surrounding

<sup>&</sup>lt;sup>48</sup> Airpower in Three Wars, 102.

<sup>&</sup>lt;sup>49</sup> General William Momyer, End of Tour Report, K740.131, IRIS# 00524451, AFHRA, November 1970, 14.

<sup>&</sup>lt;sup>50</sup> General William Momyer, End of Tour Report, K740.131, IRIS# 00524451, AFHRA, November 1970, 13.

<sup>&</sup>lt;sup>51</sup> Airpower in Three Wars, 108.

Hanoi and Haiphong. TF-77 flew missions into the eastern portion, RP6B, while Seventh Air Force controlled operations into RP6A. The majority of the high priority targets lie within RP6. It was all quite complicated.<sup>52</sup>

Momyer was also confronted with the complexity of the political restrictions of Rolling Thunder operations. A Seventh Air Force request to strike a particular target in North Vietnam had a long path to travel for approval. The request was first forwarded to the PACAF commander, then on to CINCPAC. Next, CINCPAC integrated the Air Force requests with the Navy requests and forwarded both specific targets and campaign concepts to the Joint Chiefs of Staff (JCS). These proposals were integrated with the recommendations of a group on the Joint Staff to produce a targeting 'package.' A meeting of the service chiefs then discussed both the concepts and the individual targets in the proposed package, and either changed the concepts and targets or approved them. Next, the chairman of the Joint Chiefs discussed the package with the secretary of defense, who then discussed the package with the secretary of state and finally sent it on to the president for final approval which came during infamous Tuesday meetings of the President, the Secretary of Defense, and other members of the President's National Security Staff—none of whom wore a uniform.<sup>53</sup> This whole process meant numerous changes to Rolling Thunder targets, all in an attempt to put pressure on the government of North Vietnam, and represented an unusual exercise of political prerogative in the operational conduct of war.

This, then, was the command environment Momyer stepped into when he took control of Seventh Air Force. For a man studied in doctrine, but perhaps more importantly, in the history and theory behind the doctrine, Momyer was exasperated by the dysfunction that appeared in nearly every arena when he arrived. He had three different command arrangements for prosecuting the air battle in three different countries. He had only coordinating authority for three different de facto air forces – the Marines, the Navy, and the air assets of Strategic Air Command. His own service denied him operational control of B-

-

 $<sup>^{52}</sup>$  General William Momyer, End of Tour Report, K740.131, IRIS# 00524451, AFHRA, November 1970, 14.

<sup>&</sup>lt;sup>53</sup> General Wheeler, Chairman JCS, testimony to US Senate. *Air War Against North Vietnam: Hearings Before the Preparedness Investigating Subcommittee of Committee on Armed Services*. 90<sup>th</sup> Cong., 1<sup>st</sup> sess., Part 2, August 16, 1967, 139–140.

52s and KC-135s. While Momyer had operational control over sorties against North Vietnam, it was only Air Force sorties, only against specific targets in specific areas, and only after targets were either chosen or approved by the highest authorities. This was not the way he envisioned the ideal command organization, but he was now faced with the daunting task of affecting change where he could while working within the system as it existed.

## Chapter 9

## Opening Act

As he took command of Seventh Air Force, Momyer faced a cunning enemy who executed a complex and multi-pronged strategy. The enemy strategy and their chosen method of warfare presented major challenges not only for the troops on the ground but also for airpower. A more optimum arrangement for operational control could only help Momyer's efforts, but Momyer also knew interpersonal relationships were important to his efforts to fight the war he faced. It was these relationships, even when the lines of control were convoluted, which could help find success in Vietnam. While Airmen under Momyer's operational control conducted a wide variety of missions in North Vietnam, Laos, and South Vietnam, this chapter isolates Momyer's efforts to interdict an extremely aggressive enemy flirting with conventional operations in the second half of 1966.

In warfare, the enemy always matters, and North Vietnam's strategy and force structure framed American interdiction efforts. Hanoi centrally controlled all formal communist forces in South Vietnam. The Central Committee of the Communist Party of Vietnam, the highest committee within the Communist party of North Vietnam, made no secret of their intent to overthrow the government of South Vietnam and to unify the nation. Yet, these leaders were out of reach from the airpower at Momyer's command. From the safety of their sanctuary in Hanoi, Ho Chi Minh and the Central Committee provided guidance to their satellite communist organization in South Vietnam, the People's Revolutionary Party (PRP). The PRP in turn provided guidance to the National Liberation Front (NLF). The NLF not only worked for the upheaval of the U.S. backed government in the South, but also attempted to make the insurrection in the south appear as if it sprang solely from the people in South Vietnam. The military wing of the NLF was the People's Liberation Armed Forces (PLAF), more commonly known as the Viet Cong (VC).

The Central Committee in Hanoi directed the war in the South through the Central Office for South Vietnam (COSVN). As Momyer sat at his desk in

<sup>&</sup>lt;sup>1</sup> Warren Wilkins, *Grab Their Belts to Fight Them: The Viet Cong's Big-Unit War against the U.S.*, 1965-1966 (Naval Institute Press, Annapolis, Maryland, 2011), 7-11.

Saigon, the COSVN headquarters was only eighty miles to the northwest, just across the border in Cambodia. In many ways, the senior North Vietnamese Communist official in COSVN was Westmoreland's peer in South Vietnam, but only for the southern half of the country. In 1966, that man was General Nguyen Chi Thanh. Other senior military officers from the North Vietnamese Army (NVA) also served in COSVN.<sup>2</sup> Although the common conception of the VC under COSVN direction is of a black pajama-wearing insurgent who fought with a knife, the reality was a complex military organization of three general levels of combatants - part-time militia VC, full-time local-force VC, and full-time geographically autonomous main-force VC.<sup>3</sup>

The other forces on the field of battle in South Vietnam came directly from the People's Army of Vietnam (PAVN), often better known as the North Vietnamese Army (NVA). In the lead of the NVA was General Vo Nguyen Giap, the minister of defense and the military mastermind behind the 1954 defeat of the French at Dien Bien Phu. The NVA units fell under the NVA High Command and often remained directly attached to the High Command even when they entered the battlefield in South Vietnam. The NVA units were conventional forces and very well trained. Westmoreland and Momyer placed great importance on tracking these divisions. The NVA knew it and even changed their unit designations on a recurring basis in an attempt to spoil American intelligence collection.<sup>4</sup>

To get supplies and personnel to the fight in the south, Hanoi established the General Directorate of Rear Services (GDRS). Although consisting of a number of sub-organizations, the massive effort of moving supplies to South Vietnam fell under the responsibility of the 559th Transportation Group. Most estimates put the personnel assigned to this organization at 50,000 soldiers and 100,000 civilian laborers. Their transportation system was both simple and complex. The simplicity was in the modes of transportation. Supplies moved by every mode the mind could fathom – foot, bicycle, truck, boat, and

\_

<sup>&</sup>lt;sup>2</sup> James Rothrock, *Divided We Fall: How Disunity Leads to Defeat* (AuthorHouse, Bloomington, Indiana, 2006), 58.

<sup>&</sup>lt;sup>3</sup> Warren Wilkins, *Grab Their Belts to Fight Them: The Viet Cong's Big-Unit War against the U.S.*, 1965-1966 (Naval Institute Press, Annapolis, Maryland, 2011), 15.

<sup>&</sup>lt;sup>4</sup> Michael Lee Lanning and Dan Cragg, *Inside the VC and the NVA: The Real Story of North Vietnam's Armed Forces* (Texas A&M University Press, 2002), 80.

many others. The complexity lie in the redundant network of trails and methods to ensure supplies arrived despite the efforts of the American military. The Ho Chi Minh trail, the logistics pathway through southern Laos, is most synonymous with the logistics flow to the south. John Prados, a military historian who has written extensively about the trail, believed, "by the end of 1965, there were 10,000 to 12,000 Vietnamese directly involved in maintaining or extending the Trail, and an equal number engaged in moving supplies."5 Assuming two days of combat per month, a Defense Intelligence Agency study estimated the external supply requirement of the communist forces in the south to be 45 -75 tons per day. Scaled back enemy operations, at the rate of one day of combat per month, only required 30-45 tons per day. Accounting only for truck traffic, an average of 28 trucks per day moved south into the panhandle of Laos. Each truck travelling the trail could carry approximately 3 tons of supplies. The study estimated the average year round trail capacity as 400 tons/day in the dry season and 100 tons/day in the wet season.<sup>6</sup> Therefore, the capacity of the trail far outweighed the general supply requirements for combat in the south. For Momyer, a man who spent much of his professional life studying the application of airpower in the interdiction of enemy supply lines, Vietnam was the ultimate challenge.

The communist strategy in the fight for South Vietnam was inspired. In the words of Douglas Pike, a noted expert on Vietnam, Ho Chi Minh and Vo Nguyen Giap, "invented nothing, discovered nothing, but they synthesized what had been learned about war and politics." Dau tranh, a powerful and emotional Vietnamese word meaning 'struggle,' was the name for the Communist strategic concept, erasing "entirely the line between military and civilian by ruling out the notion of noncombatant." The two primary elements of dau tranh strategy were dau tranh vu trang, the armed struggle, and dau

<sup>&</sup>lt;sup>5</sup> John Prados, "The Road South: The Ho Chi Minh Trail," in *Rolling Thunder in a Gentle Land: The Vietnam War Revisited*, Andrew Wiest, ed. (Osprey Publishing, New York, 2006), 83.

<sup>&</sup>lt;sup>6</sup> A Study Of Data Related To Viet Cong/North Vietnamese Army Logistics And Manpower, 29 August 1966, Folder 03, Box 05, Larry Berman Collection (Presidential Archives Research), The Vietnam Center and Archive, Texas Tech University, 8, 10, 33. <sup>7</sup> Douglas Pike, *PAVN: People's Army of Vietnam* (Presidio Press, Novato, California, 1986), 210.

<sup>&</sup>lt;sup>8</sup> Douglas Pike, *PAVN: People's Army of Vietnam* (Presidio Press, Novato, California, 1986), 211.

tranh chinh tri, the political struggle. Douglas Pike termed the two the hammer and the anvil of the communist strategy. The armed struggle was the application of violence across the spectrum of conflict. From kidnappings to main-force combat, no tactic was off limits.<sup>9</sup>

Just four years before he arrived in Saigon, Momyer had worked extensively on the Disosway Board's report for counterinsurgency warfare. The board surveyed Air Force capabilities and responses across the levels of the Chinese Three-Stage Guerrilla War Concept. Although the time on the board gave Momyer familiarity with the concepts of revolutionary warfare, he believed Vietnam was a conflict in Stage III, or limited war. Much later, others took a more nuanced approach. General Phillip B. Davidson, who served as Westmoreland's director of intelligence for a portion of the time Momyer was in Vietnam, argued in a detailed study the North Vietnamese prosecution of revolutionary war constituted a mosaic: "in one area it may be in Phase III, conventional war, while nearby it may be in Phase II, and somewhere else it may be a Phase I insurgency." 10

Throughout late 1965 and early 1966, the North Vietnamese debated how they would use the stages of revolutionary war to their advantage. In December of 1965, the Party First Secretary gave a speech to the Party Central Committee laying out the relationship between the fight and the desired objective. He called for all to fight, "until the puppet army has essentially disintegrated and until we have destroyed an important portion of the American army so that the American imperialist's will to commit aggression will be shattered and they are forced to recognize our conditions for peace." In early 1966, Giap met with the secretariat of the Central Military Party Committee (CMPC), the ultimate authority on military policy for North Vietnam. During this meeting, the CMPC decided the combat methods for their 1966-67 campaign. They desired to "intensify massed combat operations and launch

<sup>&</sup>lt;sup>9</sup> Douglas Pike, *PAVN: People's Army of Vietnam* (Presidio Press, Novato, California, 1986), 211, 219.

<sup>&</sup>lt;sup>10</sup> Phillip B. Davidson, *Secrets of the Vietnam War* (Presidio Press, Novato, California, 1990), 20.

<sup>&</sup>lt;sup>11</sup> Pham Thi Vinh, ed., Van Kien Dang Toan Tap, Tap 26, 1965 [Collected Party Documents, Volume 26, 1965] (Hanoi: National Political Publishing House, 2003), 593-596, 607-616. Translated for CWIHP by Merle Pribbenow.

medium-size and large-scale campaigns" by their "main force units in the important theaters of operations." They also wanted to intensify "guerrilla warfare efforts and conduct coordinated combat operations between the guerrilla militia, local force troops, and a portion of our main force troops." The CMPC sought to "combine armed operations with the political struggle of the masses in the cities and their surrounding areas," and "maintain close coordination between the military struggle, the political struggle, and troop proselytizing." <sup>12</sup>

Momyer later wrote, "whereas the war in South Vietnam was initially viewed as a counterinsurgency, it was soon apparent that the North Vietnamese were employing forces similar in firepower, mobility, and strength to the units that assaulted Dien Bien Phu."13 As the conflict escalated in 1966, and the very capable forces of the NVA moved into South Vietnam, Momyer appeared to be right. The CMPC had, "decided that eastern Cochin China, the Central Highlands, and Tri-Thien were key battlefields on which to engage and annihilate enemy forces." Cochin China was the southern third of South Vietnam, with Saigon at its center. II FFV had responsibility for that geographic area. The Central Highlands consisted of territory patrolled by I FFV. Tri-Thien was the PAVN's name for territory in the I Corps region, patrolled by the III MAF. "On these battlefields," North Vietnamese officials believed, "we needed to build, in a step-by-step and focused manner, a large transportation and supply warehouse network to prepare for combat operations using our main force troops."<sup>14</sup> In February of 1966, North Vietnam sent the 324B NVA division south into Quang Tri province. 15 By April, the communists took responsibility for Tri-Thien-Hue out of COSVN's hands, and placed it under control of the NVA, creating a new military region of control. <sup>16</sup> In June, as further evidence of

<sup>&</sup>lt;sup>12</sup> Military History Institute of Vietnam, *Victory in Vietnam: The Official History of the People's Army of Vietnam, 1954-197*, translated by Merle L. Pribbenow (Lawrence, Kansas: University Press of Kansas, 2002), 174.

<sup>&</sup>lt;sup>13</sup> Airpower in Three Wars, 324.

<sup>&</sup>lt;sup>14</sup> Military History Institute of Vietnam, *Victory in Vietnam: The Official History of the People's Army of Vietnam*, 1954-197, translated by Merle L. Pribbenow (Lawrence, Kansas: University Press of Kansas, 2002), 174.

<sup>&</sup>lt;sup>15</sup> Phillip B. Davidson, *Vietnam at War, The History, 1946-1975* (Presidio Press, Novato, California, 1988), 417.

<sup>&</sup>lt;sup>16</sup> Mark W. Woodruff, *Unheralded Victory: The Defeat of the Viet Cong and the North Vietnamese Army, 1961-1973* (Presidio Press, Novato, California, 2005), 115.

the enemy's intentions near the DMZ, they established the B5 front, also called the Highway 9 front. "The mission of the Highway 9 front," read an official history, "was to aim at establishing a new direction of attack for us into a weak area of the enemy in the South Vietnam battlefield, forcing the enemy to disperse its forces into the mountains and in order to eliminate the enemy by using strong regular army elements from the north."<sup>17</sup>

Despite indications of the complexity of the enemy strategy, critics of the war in Vietnam tend to generalize the fight there as a pure insurgency. Dennis Drew, a noted expert on Air Force doctrine, believed one of the most common errors was ignoring "the revolutionary basis for the war as well as the guerrilla tactics and insurgent strategies used (even by regular enemy forces) during much of the war."18 Of guerrilla tactics, Drew wrote, "unlike conventional or European military operations designed to win a quick victory, guerrilla tactics are designed to avoid a decisive defeat at the hands of a stronger enemy."19 Rebutting an article in a professional journal, Drew believed, "even as the Vietcong organized into bigger administrative units and even as NVA forces infiltrated south, they continued to employ guerilla-style tactics,"20 a judgment shared by Mark Clodfelter, another noted expert on airpower in the Vietnam War. The entire communist force in South Vietnam, Clodfelter explained, "waged an infrequent guerrilla war and fought an average of one day in 30." 21 Earl Tilford, a practiced Airman and scholar, argued the war did not become a conventional conflict "until after 1969, after the United States had been defeated – in effect, if not in fact."<sup>22</sup> Finally, the Air Force officer who became

<sup>&</sup>lt;sup>17</sup> Sedgwick D. Tourison, Jr., translator, *B5-T8 in 48 QXD: The Secret Official History of the North Vietnamese Army of the Siege at Khe Sanh, Vietnam, Spring 1968* (Wauwatosa, Wisconsin, 2006), 4.

<sup>&</sup>lt;sup>18</sup> Colonel Dennis M. Drew, USAF, "Insurgency and Counterinsurgency: American Military Dilemmas and Doctrinal Proposals," Air University Press, Maxwell Air Force Base, Alabama, March 1988, 2.

<sup>&</sup>lt;sup>19</sup> Colonel Dennis M. Drew, USAF, "Insurgency and Counterinsurgency: American Military Dilemmas and Doctrinal Proposals," Air University Press, Maxwell Air Force Base, Alabama, March 1988, 2.

<sup>&</sup>lt;sup>20</sup> Colonel Dennis Drew, USAF, Retired, "The Role of Airpower in Vietnam, " *Aerospace Power Journal*, Summer 2001, Ricochets and Replies.

<sup>&</sup>lt;sup>21</sup> Lt Col Mark Clodfelter, USAF, Retired, "The Role of Airpower in Vietnam, " *Aerospace Power Journal*, Summer 2001, Ricochets and Replies.

<sup>&</sup>lt;sup>22</sup> Maj Earl H. Tilford, USAF, Retired, "The Role of Airpower in Vietnam, " *Aerospace Power Journal*, Summer 2001, Ricochets and Replies.

one of Momyer's harshest critics in Vietnam, General Harry C. "Heinie" Aderholt, the commander of an air commando wing in Thailand, believed the war was, "an insurgency, and it should have been the Vietnamese's fight and not ours." <sup>23</sup>

Years after he left Vietnam, Momyer wrote that much of the analysis of the war was "weighted too much on counter insurgency." While Momyer acknowledged a counter insurgency fight existed in Vietnam, he believed the conflict in Vietnam passed through that stage of warfare quickly. "I feel the major portion of the war was fought in Phase III," meaning conventional war.<sup>24</sup> On this front, Momyer was not right. There was, as critics have said, a significant insurgency aspect of the conflict. But, there was a rhyme and a reason to Momyer's beliefs. It was in the fights against the main forces of the VC and the NVA, even if they often used guerrilla tactics, where the airpower under Momyer's command held the greatest promise and had its most tangible effects. It is also where Momyer's vision for theater airpower consistently served to defeat elements of the enemy's strategy for victory.

To mold the operations of Seventh Air Force into a more effective tool for the application of airpower, Momyer first needed the respect of those he worked with in the joint command of MACV. Westmoreland called Momyer "a man of slight build, dependable, businesslike, a fighter for his convictions but non-emotional, logical, pragmatic." Lieutenant General Bruce Palmer, who served as Westmoreland's Deputy Commanding General for U.S. Army, Vietnam, remembered Momyer was "probably the Number One Tactical Air leader in the USAF and a fine gentleman." Marine General John Chaisson, the Director of Westmoreland's MACV Combat Operations Center, said Momyer was "a very competent component commander. He was a convincing man. He knew his

<sup>&</sup>lt;sup>23</sup> As quoted in Lt Col Wray R. Johnson, USAF, "The Role of Airpower in Vietnam, " *Aerospace Power Journal*, Summer 2001, Ricochets and Replies.

<sup>&</sup>lt;sup>24</sup> General William W. Momyer to General Ellis, Memorandum, Subject: Corona Harvest (In-Country Air Strike Operations, Southeast Asia, 1 January 1965 – 31 March 1968), 1 July 1974, 168.7041-120, IRIS No. 1028238, from General Momyer papers, AFHRA. <sup>25</sup> William C. Westmoreland, *A Soldier Reports* (Garden City, New York: Doubleday and Co., 1976), 247.

<sup>&</sup>lt;sup>26</sup> Exit Interview with LTG Bruce Palmer, Jr., Deputy CG, U.S. Army Vietnam, covering period 15 May 1967 – 16 June 1968, interviewed by Major Robert H. Lovelorn, Chief Historical Section, HQ, USARV, 7-10 June 1968, Open Circulation, Military History Institute, DS558.2.P34 1968 c. 2, 11.

stuff and he knew how to present his stuff to General Westmoreland, too." Recalling Westmoreland's interaction with Momyer, Chaisson said, "a great deal of respect and confidence existed in that relationship."<sup>27</sup>

Much of Westmoreland's respect for Momyer began with the immediate push Momyer made as his air component commander. Less than a week after arriving, Momyer convinced Westmoreland to ask Sharp for Seventh Air Force control of RP2.<sup>28</sup> The weather patterns in Vietnam played a large role in the enemy's strategy. During the southwest monsoon, lasting from mid-May until mid-September, the trails in Laos were all but flooded. This reduced the enemy's ability to use the portions of the trail in southern Laos and drove their infiltration efforts through the DMZ. Commensurate with the shift in the enemy's resupply efforts, Westmoreland wanted his component commander to have control of air efforts further to the north.<sup>29</sup>

With operational control of both RP1 and RP2, Momyer hoped to gain more authority to develop a single integrated interdiction plan. But Sharp "reacted sharply against this recommendation apparently feeling that to give this additional mission to me might involve further expansion of my control over the air effort," Westmoreland later wrote.<sup>30</sup> As Sharp explained, "the concept of assigning 7th AF the responsibility for developing a single integrated interdiction plan and scheduling and coordinating the total sortie effort in RP1 and 2 is considered a step backward." Sharp believed the proposal would "place the CTF 77 assets under 7th AF removing to a considerate degree the flexibility that CTF 77 currently has in utilization of sorties available."<sup>31</sup>

Historical Branch, G-3 Division, Headquarters, U.S. Marine Corps interview with Major General Chaisson, 19 March 1969, Marine Corps History Division, 237.
 William C. Westmoreland, History File No. 7, 29 May – 16 Jul 1966, General Westmoreland's Historical Briefing, 10 July 1966, Westmoreland Papers, Center for Military History.

<sup>&</sup>lt;sup>29</sup> William C. Westmoreland, History File No. 7, 29 May – 16 Jul 1966, Message MAC5740, Westmoreland to Sharp, 03 July 1966, Westmoreland Papers, Center for Military History, 3.

<sup>&</sup>lt;sup>30</sup> William C. Westmoreland, History File No. 7, 29 May – 16 Jul 1966, General Westmoreland's Historical Briefing, 10 July 1966, Westmoreland Papers, Center for Military History, 5-6.

<sup>&</sup>lt;sup>31</sup> William C. Westmoreland, History File No. 7, 29 May – 16 Jul 1966, Message MAC5613, Sharp to Westmoreland, 13 July 1966, Westmoreland Papers, Center for Military History, 1, 3.

Westmoreland tried again, this time including General Wheeler, the Chairman of the Joint Chiefs of Staff, in his message to Sharp. In this gambit, Westmoreland first detailed indications of a building enemy offensive in I Corps, citing numerous indications the 324th B division of the NVA was infiltrating through the central and western portions of the DMZ.<sup>32</sup> Westmoreland asked for Sharp's assistance through the authorization and direction of an intensified interdiction campaign, "concentrated along the lines of communication south of Vinh [a town in the southeast quadrant of RP3] with emphasis on bridges, ferries, trucks, water craft, and storage areas."33 Westmoreland believed the interdiction campaign could "be supported while still providing out-of-country sorties to concentrate on POL and vulnerable choke points along major arteries of communication leading north from Hanoi." In closing, Westmoreland wrote, "I deem it essential that we disrupt in major degree this movement by the enemy to the battlefield even at the expense of stretching out the destruction of the lucrative Rolling Thunder targets. I urge that top priority continue to be given to the ground war in the south."34

Westmoreland's message garnered a quick response from Sharp: "I believe available air power is sufficient to accomplish interdiction in the extended battlefield as well as to meet our objectives in the north."

Westmoreland was free to use the airpower allocated for his use in whatever manner he saw fit, but Sharp would not accept the loss of any assets for the Rolling Thunder targets in the north. He believed "with the new national guidelines" from Washington, "pressure has been applied in NVN to a greater extent than has been the case in many of our previous months," and "there are indications that this pressure is having its effect." Most significantly, Sharp wrote, "it is important that this pressure not be lessened, but continually

<sup>&</sup>lt;sup>32</sup> William C. Westmoreland, Message File COMUSMACV, 1 Jul – 30 Sept 1966, Message MAC6014, Westmoreland to Sharp, 16 July 1966, Westmoreland Papers, Center for Military History, 2.

<sup>&</sup>lt;sup>33</sup> William C. Westmoreland, Message File COMUSMACV, 1 Jul – 30 Sept 1966, Message MAC6014, Westmoreland to Sharp, 16 July 1966, Westmoreland Papers, Center for Military History, 3-4.

<sup>&</sup>lt;sup>34</sup> William C. Westmoreland, Message File COMUSMACV, 1 Jul – 30 Sept 1966, Message MAC6014, Westmoreland to Sharp, 16 July 1966, Westmoreland Papers, Center for Military History, 3-4.

applied, particularly when the air assets available are adequate to meet all our needs" elsewhere.  $^{35}$ 

The exchange of messages between Westmoreland and Sharp illustrated the conflicting conceptions of senior commanders on the effective and efficient use of airpower. Sharp pushed for a focus on airpower's application against the will of the North Vietnamese while Westmoreland focused on its impact on the ground war. While Momyer pushed for more control, the command and control arrangements prevented the theater airpower expert from unifying the forces at hand for an integrated campaign against available targets. When later discussing the command and control of the route package system in Vietnam, Momyer stated MACV should have been responsible for missions into all of the route packages since "the entire air campaign against the LOCs [lines of communication] was meant to affect the battle in South Vietnam."36 As Westmoreland's component commander, Momyer saw the air campaign through the eyes of a joint forces commander trying to attain his objectives on the ground in South Vietnam. Simultaneously, as a studied Airman, he saw the potential for gaining more control to attack the will of North Vietnam to continue their support of the fight in the south.

While the verbal battle progressed between Sharp and Westmoreland, Momyer, seeing he would not get comprehensive control, began to work with TF -77 to build a more integrated interdiction campaign. "7th Air Force has had a number of meetings with the fleet," Westmoreland informed Sharp, "Momyer has advised me that great progress has been made in improving coordination and developing a more comprehensive interdiction program." Momyer was determined to make the most of his authority to coordinate Air Force and Navy operations.

Without control of RP2, Westmoreland set his sights on disrupting the flow of material across the DMZ. Westmoreland also gave the Marines in

<sup>&</sup>lt;sup>35</sup> William C. Westmoreland Collection, Box 4, Folder 1, Official Correspondence COMUSMACV – Back Channel, Eyes Only Message File, Message CINCPAC 180348Z, Sharp to Westmoreland, 18 July 1966, Military History Institute.

<sup>&</sup>lt;sup>36</sup> General William W. Momyer, *Airpower in Three Wars* (Maxwell AFB, AL: Air University Press, 2003), 104.

<sup>&</sup>lt;sup>37</sup> William C. Westmoreland, History File No. 8, 17 Jul – 17 Sep 1966, Message MAC6148, Westmoreland to Sharp, 19 July 1966, Westmoreland Papers, Center for Military History, 3.

northern I Corps clearance to start an offensive operation to drive the NVA 324B Division from the DMZ. Named Operation Hastings, the battle lasted approximately two weeks. The official Marine history called Hastings, "the largest and most violent operation of the war up to that point, involving 8,000 Marines and 3,000 South Vietnamese," against an equal number of NVA regulars. All three regiments of the 324B Division were involved. Of the fighting, General Walt said, "we found them well equipped, well trained, and aggressive to the point of fanaticism. They attacked in mass formations and died by the hundreds." The battle was hardly the hallmark of an insurgency.

During the fighting, the Marines asked for air control over a major portion of RP1 to allow "more effective intelligence/surveillance operations and more rapid air reaction against transitory targets."39 This request riled Momyer, who wanted to keep the III MAF control of airspace to a minimum. Westmoreland acknowledged Momyer's protests and held the Marines to close support of their own forces. Marine aviation units generated 1,600 sorties in support of ground operations and delivered a major blow to a well-trained NVA division.<sup>40</sup> As one Marine who fought on the ground in those days later wrote, "during Operation Hastings the Marines had full support from the sea, air and land; executed the way we were trained; with coordinated force and no rules of restriction. Death fell on the enemy daily."41 Without a doubt, the Marine airground team was lethal in independent Marine operations. Although Momyer did not see the efficacy in his own lack of operational control over close air support for the Marines in sustained operations ashore, it was the Marine's attempt to reach out further into the airspace around their immediate area of operation which frustrated Momyer.

As Hastings began, Momyer reviewed his plans for a concerted campaign named Tally Ho to disrupt the flow of supplies and personnel to the south.

<sup>&</sup>lt;sup>38</sup> As quoted in Jack Shulimson, *U.S. Marines in Vietnam: An Expanding War, 1966* (History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C., 1982), 176.

<sup>&</sup>lt;sup>39</sup> MACV 206-02 Historians Background Material, (1966) Files, V A(4) Air, Record Group 472: Records of the U.S. Forces in Southeast Asia, National Archives, College Park, Maryland.

 <sup>&</sup>lt;sup>40</sup> Jack Shulimson, *U.S. Marines in Vietnam: An Expanding War, 1966* (History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C., 1982), 274.
 <sup>41</sup> Earl J. Gorman, *Fire Mission: The World of Nam, a Marine's Story* (Red Desert Press, Clarendon Hills, Illinois, 2008), 215.

"Operation TALLY HO," Westmoreland wrote in his journal, "was conceived by me several days earlier." Westmoreland never hesitated to take full credit for ideas, but it is doubtful that he came up with the plan completely on his own. Momyer developed the plan and briefed it to Westmoreland. "General Momyer," Westmoreland wrote in his journal, "has impressed me very favorably although he has only been here approximately three weeks. I decided to send a message to General McConnell expressing my delight in his appointment to replace General Moore." McConnell, Westmoreland remembered, "appreciated my comments and stated that he knew Momyer well enough so that he was not surprised."42

The plan Momyer presented was "the first full season interdiction campaign in the North deserving the name."43 He based the control and operation of Tally Ho on the Tiger Hound operations then winding down in Laos. Since the monsoon had shifted enemy activity from Laos to the DMZ, Momyer shifted his airpower focus correspondingly. Tally Ho operations relied on visual reconnaissance of the area performed by Forward Air Controllers (FACs) flying in pairs of O-1s. Built by Cessna, the Bird Dog was first built in the late 1940's and was a slight variation of the Cessna 170, a popular single engine, general aviation aircraft.<sup>44</sup> If the FAC saw a suitable target for an air strike, he contacted a C-130 flying as an Airborne Battlefield Command and Control Center (ABCCC). "Because this ABCCC was acting for the 7th Air Force commander," Momyer later wrote, "it was authorized to decide what targets would be struck."45 Strike aircraft taking off from bases across South Vietnam first contacted a Controlling Reporting Center/Post (CRC/CRP) who directed the flights through the skies until they were within radio contact range of their specific assigned mission area. Once there, the strike aircraft contacted the ABCCC who then assigned the fighter to a FAC working a specific sector. The FAC controlled the strike and then reported the results to the ABCCC. The

\_

<sup>&</sup>lt;sup>42</sup> William C. Westmoreland, History File No. 8, 17 Jul – 17 Sept 1966, General Westmoreland's Historical Briefing, 24 July 1966, 5-6, Westmoreland Papers, Center for Military History.

<sup>&</sup>lt;sup>43</sup> "Interdiction in SEASIA: November 1966 – October 1968," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 30 June 1969, 27.

<sup>&</sup>lt;sup>44</sup> "Control of Airstrikes in SEASIA: 1961-1966," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 74.

<sup>&</sup>lt;sup>45</sup> Airpower in Three Wars, 227.

ABCCC then relayed the results back to Seventh Air Force.<sup>46</sup> It was a bulky, but effective, set-up.

To provide twenty-four hour coverage, night operations also included Army OV-1B Mohawk Side Looking Radar (SLAR) aircraft to identify enemy traffic and other Air Force C-130s, code named 'Blind Bat,' equipped to drop flares to illuminate targets for attack.<sup>47</sup> Westmoreland placed the utmost importance on the operation, but his comments in a staff meeting reflected the dysfunction of airpower control. "We will use Air Force, VNAF, Army OV-1 assets and hopefully Seventh Fleet carrier sorties which can be arranged through the coordinating committee." The man in charge of halting the enemy advance into I Corps had to hope for airpower support.

The first strikes in the Tally Ho area of operations occurred on July 20, 1966. Constrained by the DMZ and a line drawn across North Vietnam approximately 30 miles north, Tally Ho was the first dedicated use of O-1s in North Vietnam. In characterizing the success of Tally Ho, many official publications point to the secondary explosions resulting from aerial attacks. A secondary explosion indicated the presence of a stockpile of enemy ammunition. NVA divisions were more heavily armed than VC forces and thus required more ammunition to sustain their combat operations. In two particularly productive days of early Tally Ho operations, FACs directed strikes resulting in over 200 secondary explosions. As one FAC recalled, these were by far the largest ammo dumps he had yet seen explode.<sup>49</sup>

The Marines followed Operation Hastings with Operation Prairie in August, September, and October. While Marines engaged in Prairie fought heavily with the elements of the 324B division in and around the DMZ, airpower hammered away at the enemy's rear areas in Tally Ho. As the Marine commander of Prairie operations remembered, "at the beginning of Prairie we were fighting well trained and well equipped soldiers. At the end we were

<sup>47</sup> "Control of Airstrikes in SEASIA: 1961-1966," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 75.

<sup>&</sup>lt;sup>46</sup> Airpower in Three Wars, 228.

 $<sup>^{48}</sup>$  Memo: General Westmoreland's Concept for Initiation of Operation Tally Ho, 19 July 1966, Folder 02, Box 01, Ronald B. Frankum, Jr. Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>49</sup> As quoted in Jacob Van Staavern, *Interdiction in Southern Laos*, 1960-1968 (Center for Air Force History, Washington, D.C., 1993), 157.

running into poorly equipped young soldiers and frustrated commanders."<sup>50</sup> This was not the counter-insurgency fight that was being fought just miles away in the southern portions of I Corps. Marine reconnaissance units who scouted the areas around the DMZ for enemy activity had no doubt that the opponents there were highly-trained units of the NVA.<sup>51</sup> By November, as the southwest monsoon season began to turn the area around the DMZ into a mud pit, intelligence sources indicated the remaining elements of the 324B division retired from battle.

Recalling this period of combat, the PAVN official history recorded, "many of the battles fought by our troops did not fulfill our requirements for wiping out entire units and capturing prisoners and weapons," and "our losses of personnel and weapons in a number of battles were heavy."<sup>52</sup> Partially in reaction to these losses, a debate raged in Hanoi over the appropriate strategy in the south. Giap pressed for more guerrilla operations and a longer timeline while Thanh and his cohorts argued for a continued emphasis on main force actions of both the VC and the NVA. As the plan came together for the next series of NVA operations, it became apparent Thanh had won the debate.<sup>53</sup>

The efforts of Tally Ho did not stop the flow of men and supplies into South Vietnam across the DMZ. The challenges of dispersion were simply too great. Air analysts assessed operations had destroyed or damaged over 130 trucks, 1,800 structures, 210 watercraft, and 110 anti-aircraft and automatic weapons positions. Most applicable to the direct support of Hastings and Prairie, Seventh Air Force recorded over 1,400 secondary explosions. Despite these successes, a CIA study on the effects of interdiction on infiltration in 1966 held, "even if the total air attack were concentrated on the 'logistic funnel' (RP1

\_

<sup>&</sup>lt;sup>50</sup> As quoted in Jack Shulimson, *U.S. Marines in Vietnam: An Expanding War, 1966* (History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C., 1982), 198.

<sup>&</sup>lt;sup>51</sup> Edward F. Murphy, *The Hill Fights: The First Battle of Khe Sanh* (Presidio Press, Novato, CA, 2003), 60.

<sup>&</sup>lt;sup>52</sup> Military History Institute of Vietnam, *Victory in Vietnam: The Official History of the People's Army of Vietnam*, 1954-197, translated by Merle L. Pribbenow (Lawrence, Kansas: University Press of Kansas, 2002), 183.

<sup>&</sup>lt;sup>53</sup> Phillip B. Davidson, *Vietnam at War, The History, 1946-1975* (Presidio Press, Novato, California, 1988), 421.

<sup>&</sup>lt;sup>54</sup> Jacob Van Staavern, *Interdiction in Southern Laos*, 1960-1968 (Center for Air Force History, Washington, D.C., 1993), 158.

and 2), we estimate that North Vietnam could maintain the flow of men and supplies."<sup>55</sup> Momyer recognized the challenge of interdiction operations in Vietnam. "While freight trains of 40 or more cars transversed the northeast railroad leading from China to Hanoi in Route Package VI," Momyer wrote, "supplies made their way across the DMZ in trucks" and "many supplies were delivered into South Vietnam on bicycles and by porters with 'A' frames."<sup>56</sup>

Although Tally Ho was called an interdiction campaign, it was not Momyer's conception of an ideal interdiction campaign. Momyer firmly believed a well-conceived interdiction campaign began with attacks against the sources of production. <sup>57</sup> Air Force doctrine of the time did not include any further breakdown of the interdiction mission. "Tactical air force interdiction operations," read the Air Force manual on tactical air operations, "are designed to disrupt the flow [of personnel, supplies, and equipment along lines of communication] through destruction, delay or harassment to neutralize the effectiveness of enemy reserves and compromise the position of enemy forces engaged directly in combat."58 Many years later, Colonel John Warden, in his work The Air Campaign, termed the first phase Momyer conceived of as distant interdiction. Warden called it a possible war-winning campaign that had the potential to produce decisive outcomes.<sup>59</sup> In Robert Pape's seminal work on airpower and coercion, he called this particular aspect of the interdiction mission strategic interdiction.<sup>60</sup> Although Rolling Thunder was slowly evolving to contain elements of distant and strategic interdiction, Momyer's freedom to operate against the enemy's source of production were limited by the political constraints in place, the command and control arrangements, and the geographic limitations of the route pack system.

<sup>&</sup>lt;sup>55</sup> CIA Memo: An Evaluation Of The Effects Of Bombing On Infiltration Into South Vietnam, 09 March 1967, III-12, Folder 08, Box 06, Larry Berman Collection (Presidential Archives Research), The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>56</sup> Airpower in Three Wars, 196.

<sup>&</sup>lt;sup>57</sup> Airpower in Three Wars, 183.

<sup>&</sup>lt;sup>58</sup> Air Force Manual 2-1 (14 June 1965) as quoted in "Interdiction in SEASIA: November 1966 – October 1968," 30 June 1969, HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, xii.

<sup>&</sup>lt;sup>59</sup> John Andreas Olsen, *John Warden and the Renaissance of American Air Power* (Potomac Books, Washington, D.C., 2007), 70.

<sup>&</sup>lt;sup>60</sup> Robert A. Pape, *Bombing to Win: Air Power and Coercion in War* (Cornell University Press, Ithaca, New York, 1996), 75.

Momyer further compartmentalized the interdiction mission. In its next category, he saw airpower applied against "vulnerable supply lines and storage areas to destroy materiel before it reaches the combat area." Intermediate interdiction, Warden's term for this category, occurred "somewhere between the source and the front." Pape defined it more broadly as "operational interdiction," specifying the attacks should focus on "rear-area combat support functions in a theater of operations, the most important of which are tactical supply networks, reinforcements, and command-and-control facilities." Used as a strategic approach to coerce an enemy, Pape noted the intent of operational interdiction was to "induce operational paralysis, which reduces the enemy's ability to move and coordinate forces in the theater."

"Once forces and supplies arrive in the forward area," Momyer believed, "they are difficult to destroy except during a major ground action by either enemy or friendly forces." While the operations of a single NVA division did not constitute 'major ground action,' it was a step above the less intense guerrilla tactics in use by the VC in other areas of South Vietnam. This heightened activity required more logistical effort by the enemy and Momyer believed, "when supplies and forces are concentrated in the battle area . . . their vulnerability to air attacks increases sharply." Warden called operations in near proximity to ground battles close interdiction, and noted these operations were "most useful when a battle was in progress." Pape thought of these operations simply as "attrition of military forces." In Momyer's studies of the interdiction efforts during Operation Overlord, the Allied invasion of Normandy, performed mostly during his time in Orlando but refreshed at various points in his career, he came to believe ground actions closely coordinated with interdiction campaigns could have multiplying effects. Quesada, one of

\_

<sup>&</sup>lt;sup>61</sup> Airpower in Three Wars, 183.

<sup>&</sup>lt;sup>62</sup> John Andreas Olsen, *John Warden and the Renaissance of American Air Power* (Potomac Books, Washington, D.C., 2007), 70.

<sup>&</sup>lt;sup>63</sup> Robert A. Pape, *Bombing to Win: Air Power and Coercion in War* (Cornell University Press, Ithaca, New York, 1996), 72.

<sup>&</sup>lt;sup>64</sup> Airpower in Three Wars, 183.

<sup>65</sup> Airpower in Three Wars, 183.

<sup>&</sup>lt;sup>66</sup> John Andreas Olsen, *John Warden and the Renaissance of American Air Power* (Potomac Books, Washington, D.C., 2007), 70.

<sup>&</sup>lt;sup>67</sup> Robert A. Pape, *Bombing to Win: Air Power and Coercion in War* (Cornell University Press, Ithaca, New York, 1996), 74.

Momyer's most influential mentors, had firsthand experience of the effect of interdiction on the German forces, particularly at the invasion of Normandy and the two spoke often of its effects in the early days of TAC. Recalling these lessons, Momyer wrote, "regardless of their will to fight, the lack of needed weapons, food, and ammunition made it infeasible for German units to stay in the battle."

Using the low supply requirements of the NVA and VC as well as the North's ability to improvise and find new ways of getting materiel to the South, many critics and analysts have pointed out the futility of interdiction efforts. However, these critiques tend to look at interdiction efforts as a whole and fail to segment interdiction operations to see their effect, or potential effect, against certain elements of the communist's military strategy in the individual Corps areas of South Vietnam. Each time an NVA division took to the field of battle, it changed the supply equation in that local area.

The 324B division was approximately 10,000 men strong. It contained three infantry regiments as well as a supporting artillery regiment. The infantry regiments included 3 battalions of nearly 600 soldiers each. The greatest external supply requirement for these forces was ammunition. A DIA study conducted in 1966 computed the basic load, or fully armed tons of ammunition, for an NVA battalion at 12.0 tons of external supply requirement. This was in contrast to 8.0 tons for a main force VC battalion. Assuming the 324B only fought one day per month, the DIA averaged expenditures across the force, supply and infantry, to determine a supply requirement of .50 pounds per man per day. Using these figures, the 324B division, again assuming one day per month of battle, required a resupply rate of 5,000 pounds, or 2.5 tons, per day.<sup>69</sup>

The DIA study based the NVA supply requirements on the assumption a unit could defend itself for three days without resupply. This resulted in an average consumption rate per day of combat as 1/3 of the basic load. "There is nevertheless a major uncertainty in using the 1/3 basic load per day of combat

<sup>&</sup>lt;sup>68</sup> Airpower in Three Wars, 187.

<sup>&</sup>lt;sup>69</sup> A Study Of Data Related To Viet Cong/North Vietnamese Army Logistics And Manpower, 29 August 1966, Folder 03, Box 05, Larry Berman Collection (Presidential Archives Research), The Vietnam Center and Archive, Texas Tech University.

as an across-the-board consumption rate," the study read. "The uncertainty rises from the broad spectrum of engagements, running from ambushes which last a few minutes to battalion actions lasting for hours or days," and "U.S. experiences have shown that expenditure rates during attacks against fortified positions can come to twice the rates for defense." Finally, after detailing the uncertainty and potential error of the study, the authors argued, "what would be most desired is direct intelligence data on resupply rates for various enemy units." While this DIA study was not, by any stretch of the imagination, the only study of its kind undertaken during the conflict, its methods are extremely informative. While the data does not provide a foolproof determination of the resupply requirements for the 324B NVA division during the second half of 1966, it is evident that the pace of operations far exceeded the resupply rate of 2.5 tons per day, and suggests Momyer's interdiction efforts had levied a potent tax on North Vietnamese operations aiding in the defeat of that specific military operation.

Momyer's conception of Tally Ho answered Westmoreland's call for an interdiction campaign specifically aimed to harass, disrupt, and destroy the enemy's rear areas as NVA regulars took to the field of battle in I Corps.

Momyer's integrated application of command and control and specific capabilities provided twenty-four hour coverage of a surging enemy supply effort in close proximity to the ground war. While not a war-winning, decisive application of airpower, Tally Ho was a close interdiction campaign, which in conjunction with the combined arms team of the United States Marine Corps, defeated the communist's plan to establish a foothold in northern I Corps in the summer and fall of 1966. It was this application of airpower against surging enemy main force efforts, a key component of the enemy's strategy, which would continue to defeat the enemy's efforts of waging successful conventional campaigns in South Vietnam.

\_

<sup>&</sup>lt;sup>70</sup> A Study Of Data Related To Viet Cong/North Vietnamese Army Logistics And Manpower, 29 August 1966, Folder 03, Box 05, Larry Berman Collection (Presidential Archives Research), The Vietnam Center and Archive, Texas Tech University.

## Chapter 10

## Attleboro

Perhaps one of the most well-known aspects of the Vietnam War is the American method of 'search and destroy.' In his book, Westmoreland: The General Who Lost Vietnam, Lewis Sorley provides the most concise definition of Westmoreland's scheme. "What this meant in practice," wrote Sorley, "was a series of large unit sweeps, often multibattalion and sometimes even multidivision, frequently conducted in the deep jungle regions next to South Vietnam's western borders with Laos and Cambodia, designed to seek out enemy forces and engage them in decisive battle." Although commonly attributed to Westmoreland, the strategy was an accepted path ahead. It aimed, according to two of the six national military goals established for 1966, to, "increase the destruction of VC/PAVN base areas to 40-50 percent from 10-20 percent" and, "attrite, by year's end, VC/PAVN forces at a rate at least as high as their capability to put men into the field." As Westmoreland's air component commander, Momyer was responsible to integrate his forces with ground operations to attain these goals. Operation Attleboro, the first multidivision operation of the Vietnam conflict, provided a test for Momyer's close cooperation leadership and a platform for change in the command and control arrangements he inherited. Attleboro displayed the power of close air support, tactical airlift, and B-52 operations in support of soldiers on the ground.

As activities wound down near the DMZ, the situation intensified further south with the better weather near COSVN headquarters. The communists called this control sector War Zone C. It fell in the III Corps geographic area of responsibility. The largest city in War Zone C, Tay Ninh, was less than 50 miles

<sup>&</sup>lt;sup>1</sup> Lewis Sorley, Westmoreland: The General Who Lost Vietnam (Houghton Mifflin Harcourt Publishing Company, New York, 2011), 91.

<sup>&</sup>lt;sup>2</sup> Johnson Library, Warnke Papers, John McNaughton Files, McNaughton VII. Top Secret; Sensitive. McNaughton forwarded the paper to McNamara on February 10 under cover of a memorandum stating: "Here is the corrected 'Honolulu Sheet." McNaughton also sent copies to Vance and Goodpaster. A draft of the paper was forwarded to Unger by Blouin on February 12 under cover of a memorandum that called it "a draft of the US/GVN military objectives for 1966 which were developed at Honolulu." (Department of State, EA/VN-Vietnam Working Group: Lot 72 D 219, JCS Working Papers, 1966–1967), as posted in Foreign Relations of the United States, 1964–1968, Volume IV, Vietnam, 1966, Document 70, available from

http://history.state.gov/historicaldocuments/frus1964-68v04/d70.

from Saigon. Short and protected supply lines made War Zone C a desired operating location for the communist forces. Unlike Tally Ho, where large amounts of the enemy rear guard were open to attack, most of the enemy rear for War Zone C was over the border in neutral Cambodia. Even better for the communists, the government of Cambodia took no effort to keep COSVN from using the Cambodian port of Sihanouk as a means of resupply.<sup>3</sup>

As part of his own strategy of search and destroy, Thanh decided to use his main force VC 9th Division to mount an offensive in War Zone C. The 101st Regiment of the NVA augmented the 9th. Thanh's target was the American 196th Light Infantry Brigade, newly arrived in theater. Ignorant that he was in the enemy's bore sights, and eager to begin combat operations, the 196th commander, Brigadier General Edward H. DeSaussure, ordered one of his battalions to sweep the countryside as his other two battalions established their new base in Tay Ninh. In these sweeps, the unit discovered a number of rice caches spread throughout the countryside. Given that the VC's only real food requirement was modest amounts of rice, the caches were a valuable part of the enemy's effort. DeSaussure directed his forces to locate and evacuate as many of the rice caches as possible in the region. While the sweep operations began in mid-September, it was not until early November that DeSaussure's men made first substantial contact with the enemy.<sup>4</sup> Up until that time, Momyer's striking forces saw little action in support of operations in War Zone C. Only five preplanned sorties per day were flown to the area. Attleboro, however, quickly escalated into the largest operation to date in the conflict.<sup>5</sup>

An elaborate and complex system orchestrated close air support of ground operations for Attleboro. It was a system Momyer knew very well from his years of immersion in theater air. "The organization for air-ground operations in Vietnam had its genesis in North Africa and was modified in the battle for Europe," he later wrote. To get preplanned air support in South

<sup>3</sup> George L. MacGarrigle, *Taking the Offensive: October 1966 – October 1967* (Center of Military History, United States Army, Washington, D.C., 1998), 31.

<sup>&</sup>lt;sup>4</sup> George L. MacGarrigle, *Taking the Offensive: October 1966 – October 1967* (Center of Military History, United States Army, Washington, D.C., 1998), 31.

<sup>&</sup>lt;sup>5</sup> "Operation Attleboro," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 14 April 1967, 6.

<sup>&</sup>lt;sup>6</sup> Airpower in Three Wars, 287.

Vietnam, an Army battalion commander, normally a lieutenant colonel with anywhere from 300 to 1,000 soldiers under his command, submitted a request to his superior organization through the Army Air-Ground System (AAGS). This network allowed the battalion commander to tie his air requests with the rest of the Army's organic firepower including artillery and helicopter gunships. After receiving the requests of his three infantry battalions, DeSaussure, the brigade commander in this specific case, submitted his consolidated requests to Major General Frederick C. Weyand, the 25th Division Commander. To develop and consolidate his air requests, DeSaussure and other brigade commanders relied upon the advice of an attached Air Liaison Officer (ALO), an Air Force pilot who attended daily meetings and advised the commander on how tactical airpower could contribute to desired objectives. The ALO also headed a Tactical Air Control Party (TACP). The TACP consisted of FACs, radio operators, and communications jeeps.

Weyand forwarded his consolidated requests to the Corps Tactical Operations Center (CTOC), the command center for the II Field Forces Vietnam (II FFV) Commander, Lieutenant General Jonathan O. Seaman. At the CTOC, requests from Seaman's three divisions were once again analyzed and sent on to the MACV Tactical Air Support Element (TASE) in Saigon. Officers from the MACV J-2 (Intelligence) and J-3 (Operations) directorates, primarily Army and Marine Corps officers, staffed the TASE. These officers determined the final priorities for the close air support effort for each day and, as authorized agents of Westmoreland, determined the specific tasks to be accomplished by air. The advice and counsel of the ALO's and FAC's was the only Air Force representation within this system.

The TASE was the Army portion of Westmoreland's Joint Air-Ground Operations System (JAGOS). Momyer's equivalent and parallel system of the AAGS was the Tactical Air Control System (TACS). The facilities, personnel, and equipment responsible for running the TACS were collectively known as the Tactical Air Control Center (TACC). Once the TACC received the ground requests for air from the TASE, the strike planners within the TACC determined the number and type of aircraft, the ordnance, the time over target (TOT), and the FAC who had control responsibility for each target. In the evening, the

wings received notification via fragmentary orders, or the frag, which contained all preplanned strikes for the next day. This allowed the wings to arm their aircraft with the appropriate weapons and plan the missions.

Momyer viewed the TACS not as a technical means for passing orders, but as an operational entity. One of his first efforts when he arrived in theater was to put the responsibility for the system into the hands of operators rather than communications personnel. Prior to Momyer's arrival, a PACAF communications organization owned the TACC. Momyer believed communications organizations could be responsible for fixing and maintaining the equipment of the TACC, but he wanted it to be, "a projection of the command arm of the commander."

Another important element to the control of close air support was the Direct Air Support Center (DASC). While the TASE and TACC decided the apportionment for preplanned sorties, the DASC's were critical for immediate requests for air support. There were six DASC's spread across South Vietnam. All were subordinate organizations of the TACC. Each had a responsibility for a specific region and was a joint Vietnam Air Force and U.S. Air Force operation. III DASC, located at the ARVN III Corps Headquarters adjacent to Bien Hoa Air Base, was responsible for III Corps and Seaman's II FFV. The primary purpose of the DASC was minute-to-minute coordination with the ground forces in their area of responsibility.

Momyer had witnessed the earliest days of coordination for close air support as the Allied forces made their way across Tunisia and Italy. Having battled against the Army's direct control of airpower in the early days of that campaign, Momyer's thoughts on the importance of airpower availability to ground commanders may be surprising. "In World War II and Korea there had been very little decentralization of authority below the tactical air force level. The decisions were made at the field army / tactical air force level and not at the corps level." Due to this centralization, a corps commander only received air support through preplanned requests. Momyer saw the DASC as a response to the ground commander's need to shift his requests based upon an updated

195

<sup>&</sup>lt;sup>7</sup> Letter to General Joseph J. Nazzaro, 1 October 1970, 168.7041-33, IRIS #1001145, General William Momyer Papers, AFHRA.

tactical situation. "The fluidity of the ground battle within a corps area often made it necessary for the ASOC (synonymous with DASC) to divert strike aircraft from preplanned targets in support of ground units." Momyer believed, "this gave the corps commander some flexibility to change the importance of targets at any given time or to support the ground unit, which needed air support the most."

Although often accused of being 'dogmatic' and 'doctrinaire,' Momyer understood when past experience did not justify present or future practice. When it came to the needs of the ground commander, Momyer often chose effectiveness over efficiency. Built upon years of doctrine discussions with the Army, Momyer had a firm grasp of airpower's role in the ground campaign and most importantly, ground forces perspectives on the role of airpower. Although not always his strong suit, Momyer's ability to adapt doctrine to the realities of combat served him well throughout his command.

On any given day, FACs took off and contacted their respective TACP to get mission updates. The FAC built a mental and visual picture of the situation on the ground below through coordination and conversation with the ground commander. Most importantly, the FAC determined the positions of friendly forces to minimize the risk of fratricide while maximizing the potential for the destruction of enemy targets. Once the fighters for the preplanned attacks arrived on scene, they contacted the FAC who briefed them on the ground situation and directed them to their targets.

If friendly forces became engaged with the enemy and needed support in addition to any preplanned missions, the engaged unit could make a request for immediate support. Normally the unit called the airborne FAC. The FAC relayed the request to the TACP who went to the DASC to request support. The DASC could divert a preplanned mission to fulfill the request or, if no preplanned missions were available, the DASC contacted the TACC to immediately launch fighter aircraft from one of the nearby air bases. While this coordination was underway, the TACP received word and called the FAC to inform him the mission was enroute. The request also processed through ground channels, but these were formalities and immediate requests were

\_

<sup>&</sup>lt;sup>8</sup> Airpower in Three Wars, 293-294.

rarely denied. On average, diversions took 20 minutes to be ready to strike and the launches of aircraft on the ground, also known as alert scrambles, took 40 minutes. The FAC responsibilities in an immediate request were more complex than preplanned requests, as there was a good chance the situation on the ground was changing rapidly, making communication between the FAC and the ground commander critical. Due to the complexity of these operations, one of Momyer's first actions when he arrived in Vietnam was to establish a Theater Indoctrination School for new FACs at Bien Thuy Air Base just southwest of Saigon.<sup>9</sup>

Momyer placed a great deal of responsibility on the backs of his FACs. "With the enemy infiltrating throughout the country," Momyer wrote, "except for certain areas where there were few civilians the problem of preventing or, minimizing civilian casualties was extremely critical." Although Momyer believed the communists escalated the fight above the pure insurgency level, he understood some of the unique aspects of fighting for the 'hearts and minds' of the people of South Vietnam. "Obviously the bombing of innocent civilians," he wrote, emphasizing the importance of minimizing civilian casualties, "aside from being inhumanly wrong, would quite defeat our purpose - to convince the civilian population to help the government eradicate the NVA and VC." Momyer recognized this difference from the wars he fought and studied. "In those wars," Momyer wrote, "once the aircraft passed the 'bomb line,' the crew could assume that anything that moved was directly associated with support of the enemy's fighting force and was a legitimate target. Towns and villages were struck when the enemy used them for bivouac of troops, supply points, or staging for further attacks." Momyer, in blunt terms, wrote, "If civilian casualties did occur, they were a collateral effect of the attacks against the military target."<sup>10</sup> Momyer knew the war in Vietnam was a different battlefield.

In appraising the whole system for control of air in support of ground operations, Momyer wrote, "the command and control system, as designed during World War II and Korea and refined for Vietnam operations, facilitated

<sup>&</sup>lt;sup>9</sup> Ralph Rowley, "FAC Operations, 1965 – 1970," Office of Air Force History, May 1975, 27.

<sup>&</sup>lt;sup>10</sup> Airpower in Three Wars, 298-299.

the employment of airpower wherever it was needed."<sup>11</sup> While there were certainly common elements from World War II and Korea, this statement reflected Momyer's tendency to oversimplify the 'logical' progression of the control of airpower. Most notably, Momyer wrote this passage after spending pages explaining the difficulties of the iterative process of changes in the system as the mission in Vietnam expanded. As with the systems in World War II and Korea, the system in Vietnam reflected a series of compromises, founded in prior experience, but adapted to the situation at hand.

While the striking power of Momyer's fighters helped the soldier in battle, it was his transport and airlift planes that often delivered soldiers to the battle and kept them supplied. While no central airlift organization existed when he arrived in country, Momyer activated the 834th Air Division less than a month before Attleboro began. Responsible for all airlift units in South Vietnam, the 834th operated the Airlift Control Center (ALCC), a subordinate element of the TACC and responsible for planning, coordinating, scheduling, and flight following airlift assets across South Vietnam. All regularly scheduled and special request airlift had to be approved by the MACV Traffic Management Agency (TMA). Immediate airlift support for a changing environment in operations like Attleboro, on the other hand, fell into the category of emergency response. For these airlift actions, a request generated from DePuy's division headquarters routed through Seaman's II FFV and up to the MACV Combat Operations Center (COC) for approval. The COC then passed it to the ALCC to dedicate equipment for the mission. 13

Much like the TACP system, each ground commander down to the brigade level had a Tactical Air Liaison Officer (TALO). Seaman's senior TALO was his advisor on tactical airlift. At the same time, the TALO answered to the DASC director and the II FFV ALO. A TALO helped commanders plan for unit moves and informed the ALCC as soon as the request for support started through the Army chain. This gave the ALCC advance notice and an opportunity to begin coordination while the request made its way through the

<sup>&</sup>lt;sup>11</sup> Airpower in Three Wars, 308.

<sup>&</sup>lt;sup>12</sup> "The War in Vietnam, 1966," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 23 October 1967, 146.

<sup>&</sup>lt;sup>13</sup> "Operations, Seventh Air Force In-Country Tactical Air Operations," 7AF Pamphlet N. 55-1, Headquarters Seventh Air Force, 20 March 1968, 98.

chain of command, resulting in a more timely response to the requirements of the ground force. Interestingly, the assignment of TALO's as low as the battalion level and the emergency request system were conditions stipulated by the Army before giving up their fleet of dedicated Caribou airlift aircraft to the Air Force in the McConnell-Johnson agreement.<sup>14</sup>

This was the system supporting DeSaussure as he sent his men further north from Tay Ninh on November 3, 1967. The thick jungles, stifling heat, and difficult terrain facing the American soldiers was daunting enough, but as the day neared its end, DeSaussure's men made contact with a determined enemy force, the 9th Viet Cong Division. For two days, DeSaussure orchestrated his forces in brave, but according to his superiors, poorly planned efforts. At the end of November 4, Lieutenant General John Heintges, the MACV deputy commander, after listening to DeSaussure's future plans, decided to increase the American presence and experience in the fight. He chose Major General William DePuy's 1st Infantry Division, as opposed to Weyand's 25th Infantry Division, due to the 1st's recent experience with fighting the VC main force units. 15

Air support strikes increased as the fighting intensified during the first two days. But it was another of Momyer's tools that would bring even more American firepower to bear. On the night of the 4th, Momyer began a massive airlift operation to bring DePuy's forces to the battlefield. <sup>16</sup> "A steady stream of C-123s and C-130s," read the official Air Force history account, "flew troops from all over South Vietnam into Tay Ninh and forward airstrips." <sup>17</sup>

As Attleboro spun into high gear, ninety-one emergency requests for airlift poured into the ALCC. A C-123 landed at the airfield at Dau Tieng every seven minutes. On average, record keepers found it took 1.7 hours from the time an emergency request was submitted until the MACV COC approved the request. The time from request approval until the aircraft was ready to load

<sup>&</sup>lt;sup>14</sup> Ray L. Bower, *The United States Air Force in Southeast Asia, Tactical Airlift* (Office of Air Force History, United States Air Force, Washington, D.C., 1983, 1999), 237.

<sup>&</sup>lt;sup>15</sup> George L. MacGarrigle, *Taking the Offensive: October 1966 – October 1967* (Center of Military History, United States Army, Washington, D.C., 1998), 41-42.

<sup>&</sup>lt;sup>16</sup> George L. MacGarrigle, *Taking the Offensive: October 1966 – October 1967* (Center of Military History, United States Army, Washington, D.C., 1998), 42.

<sup>&</sup>lt;sup>17</sup> John Schlight, *The Years of the Offensive: 1965-1968* (Air Force History and Museums Program, 1999), 212.

averaged 3.1 hours. To reduce this response time as much as possible, Momyer directed the ALCC to divert aircraft from planned itineraries when required, which proved faster than placing aircraft on alert at their home bases. <sup>18</sup> Momyer's efforts and the TALO involvement in the emergency system paid great dividends, as the previous system took up to 12 hours for an emergency request to come to fruition. <sup>19</sup>

As troops poured into the Attleboro operating area via the airlift system, Weyand and DePuy escalated the operation to a Field Force level operation with the inclusion of elements of the 25th division.<sup>20</sup> By the end of Attleboro, over 22,000 American and allied troops found themselves in War Zone C. From the 3rd of November through the 8th of November, Seventh Air Force flew over 250 immediate air support missions in the Attleboro area. Once the III DASC received a request, the average time it took the weapons to fall on the enemy was 31 minutes, eight minutes of which were consumed in the processing of the request at the DASC. If there were no aircraft airborne and the TACC had to scramble aircraft to fill the request, the average time it took to get to the target was 27 minutes. A diverted sortie from another mission averaged only 12 minutes travel time.<sup>21</sup>

Momyer felt immediate requests were "usually very productive missions since there was no question about the location of the enemy." Reflecting on the ability to divert aircraft from preplanned targets to immediate requests, Momyer felt, "the important consideration here is the need to exploit a ground force contact that forces the enemy into the open where airpower can be most effective." Concerning the response times for immediate requests, Momyer later recorded, "there is a tendency to over emphasize the significance of response times. If a situation is critical, the air component commander would go to a system of airborne alerts which in effect produces instantaneous

\_

<sup>&</sup>lt;sup>18</sup> Ray L. Bower, *The United States Air Force in Southeast Asia, Tactical Airlift* (Office of Air Force History, United States Air Force, Washington, D.C., 1983, 1999), 245.

<sup>19</sup> "The War in Vietnam, 1966," HQ PACAF, Directorate, Tactical Evaluation, CHECO

Division, 23 October 1967,153.

<sup>&</sup>lt;sup>20</sup> George L. MacGarrigle, *Taking the Offensive: October 1966 – October 1967* (Center of Military History, United States Army, Washington, D.C., 1998), 47.

<sup>&</sup>lt;sup>21</sup> "III DASC Operations," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 1 August 1969, 19.

<sup>&</sup>lt;sup>22</sup> Airpower in Three Wars, 327.

response." Momyer believed measuring the effectiveness of close air support by response time did not tell the whole story. To fully assess the effectiveness of close air support, Momyer believed, "we have to consider the command and control system, ability to concentrate the necessary air force, weight of effort to destroy the target, survivability of the attacking force, the capability to cope with enemy countermeasures, and the ability to prevent the enemy from interfering with the execution of the attack."<sup>23</sup>

The 8th of November provided an illustrative example of Momyer's allencompassing concept of close support. During the night of the 7th, two VC battalions surrounded a single American battalion. The Americans had set up a defensive perimeter in a stand of elephant grass near densely forested jungle. At 6:15 in the morning, the battalion assigned FAC was airborne, keeping watch over the encampment. At 6:24 the communist forces charged the American perimeter and the unit called for air support. The FAC relayed the call to the TACP, who then sent it to the III DASC. At 6:31, the III DASC, unable to find any airborne aircraft it could divert, sent a request to the TACC for an alert scramble. At 6:33, the TACC alerted Bien Hoa AB, sixty miles to the southwest, and four F-100s on alert prepared to launch. As the fighters left the ground at Bien Hoa at 6:38, the Americans fought off a company-sized attack at another section of the perimeter. At 6:46 the first of the 2 F-100s arrived on scene and began working to understand the situation on the ground and the proposed attack. Before 7:00, the first weapons fell on the enemy positions, immediately after a second VC company attacked the perimeter. As one of the FAC's recalled, "we put the bombs out 200 feet in the jungle . . .we put napalm in a little closer, the CBU (cluster bomb units) a little closer than that, and the 20mm (ammunition from the aircraft gun) right in the tree line."24

The VC continued the attack after the air support arrived. Ninety minutes later, the onslaught of 43 air strikes and the brave stand by the

\_

 <sup>&</sup>lt;sup>23</sup> General William W. Momyer to Brigadier General John E. Ralph, Memorandum, Subject: Validation of Close Air Support (CAS) Phase II Results, 9 January 1975, 168.7041-131, IRIS No. 1028249, from General Momyer papers, AFHRA.
 <sup>24</sup> As quoted in "Operation Attleboro," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 14 April 1967, 26; the times are rough estimates based upon the account of the battle in the CHECO account and the average response times from "III DASC Operations," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 1 August 1969, 19.

American soldiers broke the enemy attack for good and they disappeared back into the jungle, leaving behind over 300 enemy dead.<sup>25</sup> The system alerted the fighters, their speed made up for some time lost in coordination, the skill of the FAC's provided crucial guidance, the different types of ordnance provided different effects, and the enemy was forced to withdraw. This close air support, according to the Army, "saved the day."<sup>26</sup>

On the same day, another of the tools in the Air Force arsenal announced its arrival at Attleboro when the first B-52 strike occurred in the Attleboro operating area. Eight days later, DePuy, in one of many B-52 strikes during Attleboro, requested a B-52 strike on the location of a VC regiment. Such a request qualified for use of SAC's 'Quick Run' reaction force. This force consisted of six B-52s on alert on Guam. Since each mission involved a three aircraft cell, special care was taken to ensure the target justified the loss of one half of the capability. In March of 1966, the first MSQ-77 Combat Skyspot had arrived in theater. This device, a modified bomb-scoring device, gave the B-52s the capability to radar bomb. In a quick reaction scenario, the B-52 crew received directions from a ground site on where to fly their airplane and when to drop their bombs. The MSQ-77 also gave fighter aircraft the ability to drop bombs through the weather, a critical capability in Vietnam. The average miss distance for bombs dropped in this manner was approximately 500 feet.<sup>27</sup>

Since DePuy had reliable intelligence and coordinates, the MACV COC agreed the target justified a 'Quick Run' tasking and gained approval from Westmoreland. After approval from Westmoreland, the SAC liaison officer in the COC passed the target to the 3rd Air Division on Guam for assignment and development of the mission. Seventh Air Force did not play a substantial role before the aircraft were airborne. The process resulted in a 9-12 hour response time for these critical targets. If the B-52s were airborne and could be retasked,

<sup>25</sup> "Operation Attleboro," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 14 April 1967, 26.

<sup>&</sup>lt;sup>26</sup> As quoted in "Operation Attleboro," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 14 April 1967, 26.

<sup>&</sup>lt;sup>27</sup> "The Air Force in Southeast Asia: Tactics and Techniques of Close Air Support Operations, 1961-1973," by Lt. Col. Ralph Rowley, Office of Air Force History, February 1976, 92.

the response time could be even shorter.<sup>28</sup> During the wait, DePuy held his men back from contact with the regiment while artillery fire and airstrikes attempted to trap the enemy in place. After the B-52 strike, American soldiers found only a few bodies, several collapsed bunkers, a vacated hospital complex and training center.<sup>29</sup> Recounting the use of B-52s, DePuy stated, "This is the way we kill VC around here. We find them, take two steps back, and let the Air Force kill them. Then we go pick up the bodies."<sup>30</sup>

Reflecting DePuy's philosophy, Momyer later wrote, "because of the extremely rugged terrain in many areas, our ground forces were either not available or incapable of maneuvering. B-52 strikes in some respects, then, became a substitute for ground force operations."<sup>31</sup> Although General Weyand wrote, "we had wonderful luck with the B-52 strikes," and "used them like close air support or long range artillery,"<sup>32</sup> calling the B-52s long-range artillery offended Momyer's sense of efficiency in airpower application. "Westmoreland's employment of the B-52s as long range artillery to suppress what may or may not be suspected concentrations or supply areas," Momyer later wrote, "was questionable and relatively ineffective."<sup>33</sup>

After days of bitter fighting in sweltering tropical conditions, Attleboro came to a close on November 24, 1966. Over the course of the campaign, American forces "had seized 2,400 tons of rice; had captured large ammunition caches with over 24,000 grenades, 600 mines, and 2,000 pounds of explosives; and had destroyed some 68 enemy base camps."<sup>34</sup> Commenting upon the enemy losses, Weyand told reporters shortly after the operation ended, "these

<sup>&</sup>lt;sup>28</sup> Major General John A. Chaisson Oral History, by HQ SAC/HO, 19 September 1969, p.11, K239.0512-1597, IRIS No. 01080900, AFHRA.

<sup>&</sup>lt;sup>29</sup> George L. MacGarrigle, *Taking the Offensive: October 1966 – October 1967* (Center of Military History, United States Army, Washington, D.C., 1998), 52.

<sup>&</sup>lt;sup>30</sup> As quoted in "Operation Attleboro," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 14 April 1967, 4.

<sup>&</sup>lt;sup>31</sup> Airpower in Three Wars, 319.

<sup>&</sup>lt;sup>32</sup> "Operation Attleboro," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 14 April 1967, 33.

<sup>&</sup>lt;sup>33</sup> As quoted in William P. Head, "War From Above the Clouds: B-52 Operations during the Second Indochina War and the Effects of the Air War on Theory and Doctrine," Fairchild Paper, Air University Press, Maxwell AFB, Alablama, July 2002, 24.

<sup>&</sup>lt;sup>34</sup> George L. MacGarrigle, *Taking the Offensive, October 1966 to October 1967*, (Center of Military History, United States Army, Washington, D.C., 1998), 58.

things are essential to the enemy if he is going to mount any significant actions."<sup>35</sup>

In a veiled tribute to the airlift effort, Weyand believed Attleboro was a "clear demonstration that we are now in position to change direction and mass very quickly . . . we picked up scattered battalions in nothing flat and concentrated them near Dau Tieng when they were needed in a hurry."<sup>36</sup> Weyand thought the "swift concentration of U.S. fighting power probably thwarted the opening of an extensive autumn offensive."<sup>37</sup> In November, Air Force transport aircraft set a new monthly airlift record for the conflict.<sup>38</sup> C-123s flew over 2,700 sorties and C-130s flew just over 600 sorties during the course of the operation. These aircraft transported a total of more than 8,900 tons of cargo and over 11,400 passengers.<sup>39</sup>

A great deal of responsibility for the success of tactical airlift during Attleboro lie not only in the centralization of airlift control and the talents and efforts of the airlift aircrews and load crews, but also on the shoulders of the officers employed as TALOs across South Vietnam. There was much to be said for person-to-person communication, and the TALOs brought satisfaction to Army users of Air Force airlift. Momyer understood the importance in maintaining those relationships. Shortly after Attleboro ended, higher Air Force headquarters began to question the efficacy of continuing the TALO mission. Many felt the commanders of the airlift missions or the unit ALOs could manage the TALO responsibilities. Momyer stepped in and strongly advocated the continuance of the TALO program. He believed these officers created a responsive airlift system on the same level as the close air support system. Momyer also argued against replacing airlift-qualified officers with officers who were not. Momyer knew the Army, having recently released control of its

<sup>&</sup>lt;sup>35</sup> "Old Cong Stronghold Cracked by Attleboro," *Port Arthur News*, November 30, 1966, 22.

<sup>&</sup>lt;sup>36</sup> "Old Cong Stronghold Cracked by Attleboro," *Port Arthur News*, November 30, 1966, 22.

<sup>&</sup>lt;sup>37</sup> "Old Cong Stronghold Cracked by Attleboro," *Port Arthur News*, November 30, 1966, 22.

<sup>&</sup>lt;sup>38</sup> "Attleboro Spurs Record Airlift," *Pacific Stars and Stripes*, December 05, 1966, 28.

<sup>&</sup>lt;sup>39</sup> "Operation Attleboro," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 14 April 1967, 33.

organic fixed wing airlift assets, was concerned about responsiveness.<sup>40</sup> This customer oriented mission focus displayed the capabilities of an officer steeped in the knowledge of service relationships. In focusing on the customer, Momyer was not abdicating his role as the airpower expert but was instead using his expertise to balance the customer's wants and needs with optimum application for mission accomplishment. In this case, Momyer put effectiveness before the efficiency of having less officers assigned to accomplish the mission. He was helping the Army to succeed by their own measures of success.

Following Attleboro, Momyer continued his quest for the control of C-130 units in theater. His main concern with the rotational basing PACAF had set up was a lack of efficiency. "We were wasting precious flying time ferrying aircraft back and forth," Momyer wrote. "Crews being rotated every two weeks meant a continuous training job," and, "since the skill required to get into some of the poorly prepared airfields demanded pilots who had been handling these situations daily," Momyer thought, "this type of loss was one we could particularly ill afford." Momyer attributed the rationale for his lack of control of the C-130s to be in line with the rationale for B-52s. "It was argued if a C-130 wing was assigned to 7AF," he wrote, "it wouldn't have been available for other airlift tasks in the Pacific and, therefore, PACAF would have lost control of a short resource which might have been available to meet other contingencies."41 As General Gilbert L. Myers pointed out in his end of tour report, "such a war might or might not occur but in the meantime, the Air Force stood to lose a good deal of stature with the Army for not joining the 'team." 42

Momyer exercised operational control of the C-130s through the 834th Air Division, but PACAF's 315th Air Division in Japan had command of the forces. This was another of Momyer's convoluted issues of theater control. In addition to Momyer's concerns about experience and time, Westmoreland, given his steadily increasing airlift requirements, worried about the in-country maintenance capability and spare parts supply system. "Non-flyable TDY aircraft still occupy ramp space," Westmoreland wrote, "but without the level of

<sup>&</sup>lt;sup>40</sup> Ray L. Bower, The United States Air Force in Southeast Asia, Tactical Airlift (Office of Air Force History, United States Air Force, Washington, D.C., 1983, 1999), 237.

<sup>&</sup>lt;sup>41</sup> Momyer Vietnam After Action Report, 13.

<sup>&</sup>lt;sup>42</sup> "The War in Vietnam, 1966," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 23 October 1967, 46.

maintenance necessary for a quick turnaround."<sup>43</sup> Multiple agencies put a stop to the request. PACAF not only cited a shortage of available manpower billets, but also believed the present system best fit the demands placed on the system from both MACV and PACOM.<sup>44</sup> General Harris, the PACAF commander, chided Momyer for not supporting the Air Force's rotational concept. "I shall continue," Harris wrote, "to urge Admiral Sharp to support the rotational concept and I expect you to take the same position with Westmoreland."<sup>45</sup> The Western Pacific Transportation Office, Admiral Sharp's agency responsible for the supervision of intratheater airlift, believed splitting the C-130s between PACAF and MACV would hinder the efficiency of centralized management of assets in the overall PACOM war effort.<sup>46</sup>

Although Momyer did not acquire the C-130s, he did gain control of another asset shortly after Attleboro. In January of 1967, Seventh Air Force took control of the Army's fleet of C-7 Caribou aircraft. Again, Momyer was at his best with a careful application of authority. "In all discussions," he wrote, "I proposed that we not change the method of allocating the C-7 effort until the 7AF had gained the confidence of the supported Army units, that until they were convinced that they would get better support than they received when the C-7s belonged to the Army." With this direction, the Seventh Air Force absorbed a portion of the C-7 fleet into the common airlift system while the rest were dedicated to various Army units. Momyer proposed a trial period with this arrangement to determine whether or not to assign all C-7s to the common user system.

"After watching the system work," Momyer wrote, "I was convinced we must provide some dedicated airlift to Army units," as "Army needs were best met by a relatively small airlift aircraft, like the C-7, which could operate in and

<sup>&</sup>lt;sup>43</sup> As quoted in "The War in Vietnam, 1966," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 23 October 1967, 150.

<sup>&</sup>lt;sup>44</sup> Ray L. Bower, *The United States Air Force in Southeast Asia, Tactical Airlift* (Office of Air Force History, United States Air Force, Washington, D.C., 1983, 1999), 248; "The War in Vietnam, 1966," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 23 October 1967, 46.

 $<sup>^{\</sup>rm 45}$  Message from CINCPACAF to 7th AF, 250045Z, 25 Oct 1966, 168.704-3 IRIS # 01042242, AFHRA.

<sup>&</sup>lt;sup>46</sup> "The War in Vietnam, 1966," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 23 October 1967, 151.

<sup>&</sup>lt;sup>47</sup> Momyer Vietnam After Action Report, 12.

out of rather austere outposts with a payload of around three to four thousand pounds."<sup>48</sup> There were detractors of the Air Force's allocation of Army assets. The Army Chief of Staff who signed the agreement believed the Air Force was misusing the assets. Another senior Army general complained the Air Force's strict rules resulted in the cancellation of some Caribou flights. But Momyer's flexibility in assuming control of the assets did pay discernible dividends in service relations. "The Air Force operation of the Caribou has been outstanding," praised one senior Army field force commander, "it has been far more effective then when it was under Army control." Another senior Army general agreed: "The Air Force has operated the Caribous far better than they were operated under Army control."

Reflecting back on the tactical airlift mission, Momyer wrote, "there is one major lesson which stands out above all others with respect to airlift and that is that tactical airlift is distinctly different than strategic airlift." In describing this difference, Momyer wrote, "whereas the strategic airlift task can, in an ultimate sense, be handled by a commercial carrier, the theater airlift task is rooted in combat which requires emphasis on entirely different factors such as short, relatively unprepared fields, exposure to ground fire, coordination with escorting fighters and integration into the tactical control system for direction, assistance and redirection." Momyer felt "it would indeed be a grievous error to create a single airlift force," for "theater war demands the assignment of tactical forces which had been designed, nurtured and led by commands devoted to this highly specialized form of warfare." <sup>50</sup>

Momyer wrote his after-action report two years after his return to the states and his assumption of command at TAC. Thus, his words not only reflect his experience from Vietnam but also the inevitable parochialism of a commander who, at the time, owned his own airlift assets. Momyer's argument against the consolidation of the airlift force under one command reflected a belief in the primacy of the centralized command in the theater over the centralized command of an asset type. Although one central airlift organization

<sup>48</sup> Momyer Vietnam After Action Report, 12.

<sup>&</sup>lt;sup>49</sup> As quoted in Ray L. Bower, *The United States Air Force in Southeast Asia, Tactical Airlift* (Office of Air Force History, United States Air Force, Washington, D.C., 1983, 1999), 239.

<sup>&</sup>lt;sup>50</sup> Momyer Vietnam After Action Report, 13.

could mass airlift capabilities, Momyer believed the theater commander needed command over his own airlift assets to meet the demands of the mission. At first blush, his desire seemed logically inconsistent with his belief in 'airpower indivisible' since he desired an airlift force compartmentalized into tactical and strategic platforms. However, it was actually the opposite. Momyer believed all airpower required to accomplish the theater mission should be centralized under the control of the responsible commander.

Momyer also continued his battle to gain more control of 'strategic' assets, the B-52s, used in close support of ground troops in South Vietnam. In 17 days of action in Attleboro, the bombers flew 225 sorties and dropped over 4,000 tons of bombs. As in many other actions of the war, bomb damage assessment from these strikes was lacking and often questionable. The strikes allegedly hit the COSVN headquarters on three separate days, and at least one senior COSVN general was believed seriously wounded. Momyer's viewpoint on Westmoreland's use of B-52s reflected that of his long time mentor, Lieutenant General Elwood Quesada. Upon returning from his trip to Vietnam, Quesada wrote, "I have always felt that the B-52s were to a large extent bombing forests." Momyer felt the B-52s were of questionable value when used preemptively to spoil an attack. Momyer was not against the use of B-52s in a tactical role but he believed they should be used against clearly defined targets and controlled by the senior Airman in the theater. 4

Major General Gilbert L. Myers, who was just finishing his tour as the Deputy Commander of Seventh Air Force when Momyer arrived, later recalled watching Westmoreland call for B-52 targets from a map in the MACV Combined Operations Center. "All right, we're going to launch an operation over here into Tay Ninh," Meyers remembered Westmoreland saying, "now J-2, I want you to get me three B-52 targets in that area." For Myers, this was

<sup>&</sup>lt;sup>51</sup> "Operation Attleboro," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 14 April 1967, 33.

<sup>&</sup>lt;sup>52</sup> "Operation Attleboro," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 14 April 1967, 34.

As quoted in William P. Head, "War From Above the Clouds: B-52 Operations during the Second Indochina War and the Effects of the Air War on Theory and Doctrine," Fairchild Paper, Air University Press, Maxwell AFB, Alablama, July 2002, 24.
 John Schlight, *The War in South Vietnam: The Years of the Offensive* (Air Force History and Museums Program, 1999), 206.

contrary to efficient and effective air operations, as he believed Westmoreland did not base his targets on intelligence, but on location.<sup>55</sup> In a seemingly direct response to Meyer's concern, General Chaisson recalled, "something up to 75 to 85 percent," of B-52 targets "were based on known, tangible intelligence with regard to enemy activity in the area," but "it would not be fair, however, to say that we did not put some of our B-52s on what we called 'betting the come."

A DIA study confirmed Chaisson's remarks. From the beginning of Arc Light operations through July 1966, 38 percent of the strikes were against targets categorized as base camps or training areas, 22 percent were against troop concentrations or operating areas, 15 percent were against infiltration routes, 14 percent were against logistics bases, and 11 percent were against military headquarters. "It remains difficult to determine definitely the effectiveness of the strikes," the study read, "because many of the targets were in remote areas and ground follow-up operations were delayed from a few days to weeks after a strike was launched."<sup>57</sup>

With the difficulty in assessing actual damage, many pointed to the psychological effects of the Arc Light strikes. In fact, the official history of the JCS specifically cited the psychological effects as potentially the main impact of the operations: "The bombings," the history read, "had helped to lower VC morale, increased VC desertion and defection, forced some changes in VC tactics, and disrupted to some extent the VC economy." General Lewis W. Walt, the Marine commander in I Corps, heartily endorsed this aspect of the operation. "One of the advantages of the B-52s was their surprise," Walt remembered, "I had gleaned this from talking to a number of prisoners." Walt found, "there were three weapons that the enemy time and again told me that they feared most, one was napalm, one was naval gunfire, and the other was B-

<sup>&</sup>lt;sup>55</sup> Major General Gilbert L. Meyers Oral History, by Major Richard B. Clement and Captain Ralph G. Swenston, 27 May 1970, p. 134, K239.0512-282, IRIS No. 00904200, AFHRA

<sup>&</sup>lt;sup>56</sup> Major General John R. Chaisson Oral History, by HQ SAC/HO, 19 September 1969, p.11, K239.0512-1597, IRIS No. 01080900, AFHRA.

<sup>&</sup>lt;sup>57</sup> Effectiveness of B-52 Operations, No Date, Folder 01, Box 06, Larry Berman Collection (Presidential Archives Research), The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>58</sup> Joint Chiefs of Staff History of Vietnam War (II): 1965-67 - Arc Light - Market Time - Game Warden 1966, 1 July 1970, Folder 03, Box 01, Joint Chiefs of Staff History of the Vietnam War, 1965-1967, The Vietnam Center and Archive, Texas Tech University.

52s." The enemy prisoner accounts attributed the fear of the B-52s to their inability to hear the bombers approach. As Walt relayed, "the bombs were on top of them before they realized they were being dropped." <sup>59</sup>

Excerpts from enemy interrogations substantiated Walt's claims. "One POW reported that his unit's military efforts to 'resist' had been very effective and determined prior to the strike," read the DIA report, "but were very weak and ineffective after the strike." In another account, "a North Vietnamese soldier captured in July 1966 claimed that B-52 bombings had lowered the morale of his unit, the [redacted] Division, and disrupted the supply of medicines and ammunition." In one of the most interesting effects, particularly with respect to the counterinsurgency battle, the DIA study found, "civilians are becoming increasingly aware that B-52s strike only Viet Cong controlled areas, and this realization tends to encourage noncombatants to move elsewhere – this, in turn, could reduce the Viet Cong labor base for economic and logistic support." 60

Momyer, however, was "appalled by the enormous tonnage of bombs the B-52s were dropping on the South Vietnamese jungle with little evidence of much physical effect on the enemy, however psychologically upsetting to enemy troops in the vicinity."<sup>61</sup> In Momyer's perfect conception of the use of B-52s, two squadrons would fly 150 sorties per month.<sup>62</sup> This was a stark contrast to Westmoreland's request of 800 sorties per month.<sup>63</sup> In Momyer's view, the bomber capabilities were best used where a solid determination of a massing of enemy supplies or enemy forces could be ascertained. "I do not believe," Momyer wrote, "we should look at B-52s like fighter forces for quick reaction."<sup>64</sup>

<sup>&</sup>lt;sup>59</sup> Interview of General Lewis W. Walt by Dr. Robert R. Kritt, 20 April 1971, Colorado Springs, Colorado, 3.

<sup>&</sup>lt;sup>60</sup> Effectiveness Of B-52 Operations, No Date, Folder 01, Box 06, Larry Berman Collection (Presidential Archives Research), The Vietnam Center and Archive, Texas Tech University.

<sup>61</sup> John T. Correll, "Arc Light," AIR FORCE Magazine, January 2009, 59.

<sup>&</sup>lt;sup>62</sup> William P. Head, "War From Above the Clouds: B-52 Operations during the Second Indochina War and the Effects of the Air War on Theory and Doctrine," Fairchild Paper, Air University Press, Maxwell AFB, Alablama, July 2002, 24.

<sup>&</sup>lt;sup>63</sup> Message 230338Z, Admiral Sharp to General Wheeler, 23 December 1966, p.4, William C. Westmoreland Papers, Message File COMUSMACV, 1 Oct – 31 Dec 1966, Center for Military History.

<sup>&</sup>lt;sup>64</sup> As quoted in "The War in Vietnam, 1966," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 23 October 1967,140.

His intelligence directorate went into more detail with their explanation. "Several hundred tons of bombs are dropped into a small area and are perhaps wasted," the assessment read, "whereas the same tonnage could be parceled out among a greater number of fighter bomber sorties tailored and directed against a wider spectrum of targets." Further, "in the latter instance there is a much better probability of acquiring meaningful BDA, and thus rendering a more substantive evaluation of effectiveness of Tactical Air Forces in this theater." Essentially, Momyer and others believed, ground forces were asking for a platform rather than an effect. The air arm, Momyer held, was best equipped to determine the capability suited to best accomplish the objectives of the ground commanders. It was a hallmark of the traditional and natural tensions between ground and air commanders.

Since Momyer and Westmoreland worked closely together, there is little doubt each knew the other's views on the use of the mighty B-52s. Having gained targeting control of the asset, Westmoreland did not want to relinquish control to someone who had conflicting views on its application. "The requests for B-52 strikes were always so much greater than the capability," Westmoreland later recalled, "that only I could decide where we could get the most benefit out of the B-52s."66 Momyer believed Westmoreland's use of the bomber was inefficient, and without concrete proof of their effectiveness (firm BDA), he disagreed with the MACV Commander's operational concept. Westmoreland, on the other hand, felt the reports from the field justified the B-52s effectiveness. For him, this outweighed any evidence of inefficiency. When weighing the commitment of ground troops to an area and using a different perspective of efficiency, Westmoreland believed carpet bombing the area with B-52s proved more efficient that putting tens of thousands of soldiers in the same area. The JCS agreed with Westmoreland. In justifying the Arc Light missions to McNamara, who, not surprisingly, was questioning both their efficiency and effectiveness, the JCS replied, "B-52 bombing provides a military capability in Southeast Asia which cannot feasibly be provided by any other

<sup>&</sup>lt;sup>65</sup> As quoted in "The War in Vietnam, 1966," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 23 October 1967,140.

<sup>&</sup>lt;sup>66</sup> Interview of General William C. Westmoreland Transcript, interviewed by Dr. Robert R. Kritt, 9 August 197, p. 17, K239.0512-784, IRIS #01049779, AFHRA.

available weapon system and which is required by the operational commander in support of combat operations."<sup>67</sup>

In making his case for control, Momyer advised Westmoreland the Seventh Air Force staff not only had more experience in targeting B-52s than the MACV staff, but B-52 strikes required TACS coordination for mission execution and "were essentially an extension of current tactical operations and needed to be more precisely managed to minimize mutual interference while getting the most security and effectiveness for the strike force."68 In a smart and bold bureaucratic move, Momyer gained endorsement from the Director of the MACV COC, who said the expansion of the program jeopardized the ability of the current COC staff to accomplish the mission without larger facilities or more personnel. McConnell offered to move a SAC advanced echelon (ADVON) into Momyer's staff to alleviate that problem and better integrate ARC LIGHT into the overall SEA air operations and insure that qualified personnel made the force allocation."69 While Momyer and McConnell's concepts seem to be in agreement, they were not. McConnell wished to place the B-52s under the operational control of Momyer as the Deputy Commander for Air and not the Seventh Air Force Commander. "I argued," recalled Momyer, "that it was wrong to place the control under the Air Deputy since the office had no authority and COMUSMACV was not inclined to let it function as an operating authority." According to Momyer, at one point Westmoreland "was prepared to accept the B-52s being under the 7AF Commander, but would not agree to his Air Deputy having the control."<sup>70</sup>

Although Momyer did not gain the level of control he desired, his conversations with Westmoreland allowed for the moving of the SAC Liaison from the COC to a SAC ADVON formally attached to Momyer in his role as the Deputy Commander for Air Operations. In practice, the SAC ADVON worked as

<sup>&</sup>lt;sup>67</sup> Joint Chiefs of staff History of Vietnam War (II): 1965-67 - Arc Light - Market Time - Game Warden 1966, 1 July 1970, p. 34-3, Folder 03, Box 01, Joint Chiefs of Staff History of the Vietnam War, 1965-1967, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>68</sup> "Control of Air Strikes in SEA, 1961-1966," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 1 March 1967, 90.

<sup>&</sup>lt;sup>69</sup> "Control of Air Strikes in SEA, 1961-1966," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 1 March 1967, 90.

<sup>&</sup>lt;sup>70</sup> Momyer Vietnam After Action Report, 9.

a part of the Seventh Air Force staff.<sup>71</sup> As General Chaisson remembered, this moved the preparation of messages and the communications with the 2nd Air Division on Guam from the COC to the SAC ADVON at Seventh Air Force. "I think it was to the advantage of both MACV headquarters and Seventh Air Force – and, I guess, to SAC – that this step was taken," for Chaisson believed, "it seemed to make a much smoother operation."<sup>72</sup> Momyer's formal responsibilities in the B-52 operation came only after the strikes were approved. He remained the coordination authority to ensure the B-52s had a clear route of flight as they transited South Vietnam and were supported by Seventh Air Force activities in their missions.<sup>73</sup> When asked about Momyer's informal role in B-52 targeting, Chaisson responded, "When either General Momyer or General Philpott or Keegan, the two J-2's at Seventh Air Force, personally called in and said, 'This is a real good target,' and either, 'The commander of Seventh Air Force would like to see it struck,' or 'We think it should be struck,' this automatically got a very high priority and was rarely refused."<sup>74</sup>

Unlike the B-52 force, Momyer had command over the other Air Force assets used to deliver weapons on the enemy in Attleboro. During November, there were a total of 1,629 sorties flown. Immediate sorties accounted for 485 of the total. Seventh Air Force aircraft employed nearly 12,000 tons of ordnance. According to the official Air Force history of the battle, "tactical air supported the ground forces constantly, from LZ preps to bombing the VC egress routes once the massed firepower of air-artillery-infantry had shattered their resistance." A great deal of the successful integration of airpower into the ground scheme of maneuver was due to the efforts of the TACP personnel.

<sup>&</sup>lt;sup>71</sup> Graham A. Cosmas, *MACV: The Joint Command in the Years of Escalation*, 1962-1967 (Center of Military History, United States Army, Washington, D.C., 2006), 327.

<sup>&</sup>lt;sup>72</sup> Major General John R. Chaisson Oral History, by HQ SAC/HO, 19 September 1969, p.13, K239.0512-1597, IRIS No. 01080900, AFHRA.

<sup>&</sup>lt;sup>73</sup> "B-52 Employment in Southeast Asia, 1965-1968, A Special Report," by Captain Edward Vallentiny and Colonel P. Y. Williams, Aerospace Studies Institute, Air University, Maxwell Air Force Base, Alabama, July 1969, p. 22, K239.0269-5, IRIS #1006865, AFHRA.

<sup>&</sup>lt;sup>74</sup> Major General John R. Chaisson Oral History, by HQ SAC/HO, 19 September 1969, p.14, K239.0512-1597, IRIS No. 01080900, AFHRA.

<sup>&</sup>lt;sup>75</sup> "Operation Attleboro," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 14 April 1967, 33.

<sup>&</sup>lt;sup>76</sup> "Operation Attleboro," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 14 April 1967, 33.

At the division level, they not only advised the ground commanders, but also flew dedicated visual reconnaissance missions to bring back important information to be used in battle plans. At the brigade level, these Airmen became fully immersed in the detailed plans of the ground commanders. Through first-hand knowledge of the battlefield, the ALOs could recommend the types of attacks and ordnance for each air support request, tailoring each to the desired effect and the situation at hand.<sup>77</sup>

And what of Attleboro's results? In a later assessment of the battle, Gregory Daddis, in his book No Sure Victory: Measuring U.S. Army Effectiveness and Progress in the Vietnam War, wrote, "reducing the Vietcong's fighting power had not diminished their political influence within the local hamlets and villages."78 While this assertion rings true, and states a common criticism of the attrition strategy, diminishing the fighting power of the 9th VC Division did provide a level of increased security for the pursuit of the pacification mission and towards the establish goals for the year 1966. The 9th VC Division sustained heavy losses during the battle and was in shambles as it chose to withdraw across the border in neutral Cambodia. Once again, Momyer's airpower had proven tactically decisive when the enemy engaged in battle. His adept maneuvering brought more control over theater air assets, but his own service and the firm commitment of his joint force commander denied him control over others. Strategically, the Americans denied Thanh's forces the decisive victory they desired, and foiled their plan to begin a major offensive to open up the corridors to Saigon. As Momyer later wrote, the enemy had engaged in "an open fight where our firepower, particularly airpower, could be concentrated with decisive results."79

<sup>&</sup>lt;sup>77</sup> John Schlight, *The Years of the Offensive: 1965-1968* (Air Force History and Museums Program, 1999), 213.

<sup>&</sup>lt;sup>78</sup> Gregory A. Daddis, *No Sure Victory: Measuring U.S. Army Effectiveness and Progress in the Vietnam War* (Oxford University Press, New York, 2011), 7.

<sup>&</sup>lt;sup>79</sup> General Momyer's comments on In-Country Air Strike Operations, Southeast Asia, 1 January 1965 – 31 March 1968, p. 3, 168.7041-120, AFHRA.

## Chapter 11

## Hanoi

Rolling Thunder. By the termination of the air campaign against North Vietnam in 1968, these two words came to signify the lost hopes of airpower advocates and the brave sacrifice of a generation of Airmen. Rolling Thunder was fought against the most complex system of air defense the world had ever known. Many have separated the war in North Vietnam from the war in the south. For Momyer, this was not the case. "In my judgment," he told a reporter, "the air war we are waging in the north is inseparable from the air and ground operations in South Vietnam." Through 1966, however, Momyer saw his conceptions of a cohesive war crumble as disjointed command and control arrangements and the lack of a coherent airpower strategy brought the year to a unsatisfying close.

Shortly after Momyer arrived at Saigon, he overhauled the Seventh Air Force Staff to meet his operational method. After the reorganization, it looked very much like the TAC staffs Momyer served on throughout his career, not only in structure but also in the professional resumes of its key leaders. Major General Gordon M. Graham, his vice commander, had also served as the chief of the Target Analysis Division in the Office of the Director of Intelligence at Headquarters U.S. Air Force, director of targets in the Directorate of Intelligence for the Far East Air Forces, and most recently, the Deputy for Operations at TAC. He flew P-51s in World War II, and was a triple ace with 16 1/2 kills. Brigadier General Franklin A. Nichols, an officer who flew P-38s in the Pacific in World War II, was Momyer's Chief of Staff. Brigadier General Jammie M. Philpott, the Deputy Chief of Staff for Intelligence, was a B-17 pilot and squadron commander in World War II, and had a distinguished career in Headquarters SAC in target analysis, planning, and intelligence. Momyer's Deputy of Operations, Brigadier General William D. Dunham, had commanded P-47 squadrons in the Pacific in World War II and arrived in Vietnam after serving as the deputy for operations at Twelfth Air Force. To provide equality amongst his divisions, Momyer took what was a Deputy Chief of Staff for Plans

<sup>&</sup>lt;sup>1</sup> "Our Top Airman in Vietnam," *The AIRMAN*, May 1967, 4–5.

on Operations with a number of directorates and created four co-equal deputies, the remaining two being Materiel and Plans. Each deputy served a one-year tour in theater.<sup>2</sup>

As much work as he put into creating his staff, Momyer did not use them or their talents to the advantage of the mission in Vietnam. After gaining a new deputy for operations sometime after he took command, Momyer said, "I am the Deputy for Operations for Seventh Air Force. You are the Assistant Deputy for Operations." Those who saw Momyer in action, recalled, "He had the capacity to do it, whether all men could, I don't know." Another key player on his staff remembered, "Momyer ran every aspect of that war and hardly used his staff. He was so powerful at the staff planning meetings that very little discussion occurred." Again noting the impact of Momyer's capabilities on such an arrangement, this particular Airman remembered, "Really, no one was allowed to think about that war except Momyer. He contained it all within himself. Had he not been so extraordinarily gifted and accomplished and experienced, it could have been a disaster." 5

Momyer's leadership style robbed him of the experience of those who served with him. While a military organization is not a democracy, sometimes the many are truly smarter than the few. In making this point, one of his deputies later compared Momyer's style to that of his successor, General George S. Brown. Brown, according to this Airman, "was very careful to get the best use out of his staff, which, I think, in the long run, is a more reliable way of achieving the proper direction and conduct of a complicated air war . . . his understanding of the division of labor, the limitations in span of control that preclude one man doing everything, made for a healthier operational environment; not more effective, perhaps, than it was under Momyer, but I think it was fundamentally healthier."6

<sup>&</sup>lt;sup>2</sup> "Seventh Air Force Chronology, 1966," K740.052-3, Jan-Dec 1966, AFHRA, 20.

<sup>&</sup>lt;sup>3</sup> Brigadier General Cleo M. Bishop Oral History, by Lt Col John N. Dick, Jr., 7-8 July 1976, 168, K239.0512-904, IRIS No. 1026127, AFHRA.

 $<sup>^4</sup>$  Brigadier General Cleo M. Bishop Oral History, by Lt Col John N. Dick, Jr., 7-8 July 1976, 168, K239.0512-904, IRIS No. 1026127, AFHRA.

<sup>&</sup>lt;sup>5</sup> Keegan as quoted in Edgar F. Puryear, Jr., *George S. Brown, General, U.S. Air Force, Destined for Stars* (Presidio Press, Novato, California, 1983), 173.

<sup>&</sup>lt;sup>6</sup> Keegan as quoted in Edgar F. Puryear, Jr., George S. Brown, General, U.S. Air Force, Destined for Stars (Presidio Press, Novato, California, 1983), 174.

Momyer's command center for operations in North Vietnam, unlike the TACC and the DASC's, was exclusively American. The hub for the operation in North Vietnam was known by the callsign, 'Blue Chip.' Momyer split his staff into three separate portions – one for executing the current day operation, one for planning the next day's operation, and one for planning for the day after next.<sup>7</sup> Colonel, later General, James Hartinger, was Momyer's chief of combat operation for the mission in North Vietnam. "The big question for the morning and the afternoon strikes – alpha strikes we called them," he later recounted, "was the go or no-go decision." Momyer arrived every morning at 3 am to get the brief from Hartinger and the deputy for operations. Then, Momyer, "would make the decision if it was questionable . . . if it wasn't questionable," Hartinger remembered, "the DO and I would do it."8

The weather was a critical element of each day's strikes. The primary delivery method, very similar to the attacks Momyer had flown in his P-40 in World War II, was still a visual dive attack. The aircraft approached the target area at medium altitude and then dropped down to lower altitude on their final ingress. With a desired release altitude of 6,000 feet, the ceiling needed to be approximately 12,000 feet with good visibility. This not only ensured the fighters kept visual contact with their targets throughout their attack, but also ensured they had the ability to see and react to a radar guided surface to air missile (SAM).

After making the weather call, Momyer read the reports from the previous day and then assembled his staff to discuss what lie ahead for the next two days. Momyer used the weather forecast, intelligence reports, and reconnaissance slides projected on an 8-ft-by-10-ft screen to determine the path of operations for the following day. If Momyer believed intelligence uncovered new lucrative targets, he sent the request up through his chain of command to PACAF, on to Sharp, where, if it was particularly sensitive, it travelled to the JCS for presidential approval. <sup>9</sup> Once Momyer reviewed the targets, he provided guidance to his staff on how to apply force in North

<sup>&</sup>lt;sup>7</sup> Wayne Thompson, *To Hanoi and Back: The United States Air Force and North Vietnam*, 1966-1973 (Smithsonian, Institution Press, 2000), 16.

<sup>&</sup>lt;sup>8</sup> General James V. Hartinger Oral History, by Captain Barry J. Anderson, 5-6 September 1985, 58, K239.0512-1673, IRIS No. 01095193, AFHRA

<sup>&</sup>lt;sup>9</sup> "Rolling the Thunder," TIME, December 29, 1967, 23.

Vietnam for the next two or three days. When Momyer relayed his guidance, his deputy for operations remembered, he liked to prioritize the targets to minimize losses while maximizing the destruction and impact on the enemy. Once the aircraft for the mission were airborne, Momyer moved to the 'Blue Chip' operations room. Momyer sat in a glass 'cab' in the center, and was surrounded by maps and charts rising seven feet from the floor. If Momyer wanted to see a section of the map and its associated strikes in more detail, he could press the main map and the specific expanded map section lit up. Momyer listened to the relays of the radio calls in the north as the strikes made their way into RP6. Although the weather forecast determined Momyer's go / no-go decision, it was the mission commander on the scene in North Vietnam who made the final weather determination. He listened intently as the operation progressed and then waited for the arrival of the results. The same activities occurred for the afternoon sorties in North Vietnam.

This was the pace of daily operations for Momyer. Without a doubt, he was more intimately involved in the day to day operations than one would expect for a three star general. Although the opportunity cost was the time lost viewing the war in its strategic context, Momyer was an operational commander. During his weekly Saturday strategy meetings, Momyer "provided the strategy within the guidelines and constraints and targets that had been approved from Washington or PACOM level." From the perspective of one of Momyer's deputies, "sometimes it was an hour-by-hour change in strategy based on what the enemy did in the morning. Sometimes it was day-by-day based on the weather, what targets were available. Sometimes it was a week-by-week based on what JCS targets were released to us and what flexibility we had to do the job." It was frustrating, demanding, but sometimes rewarding work.

<sup>&</sup>lt;sup>10</sup> Major General Gordon F. Blood Oral History, by Major S. E. Riddlebarger and Major R. B. Clement, April 6, 1970, 49–51, K239.0512-257, IRIS No. 904161, AFHRA.

<sup>11 &</sup>quot;Rolling the Thunder," TIME, December 29, 1967, 23.

<sup>&</sup>lt;sup>12</sup> Major General Gordon F. Blood Oral History, by Major S. E. Riddlebarger and Major R. B. Clement, April 6, 1970, 49–51, K239.0512-257, IRIS No. 904161, AFHRA.

 $<sup>^{\</sup>rm 13}$  Major General Gordon F. Blood Oral History, by Major S. E. Riddlebarger and Major R. B. Clement, April 6, 1970, 49–51, K239.0512-257, IRIS No. 904161, AFHRA.

Of his time as the director of Blue Chip, Hartinger recalled, "I really enjoyed it, especially working with General Momyer."<sup>14</sup>

While the specific restrictions changed often, the guidelines remained the same throughout Momyer's tour. Some were obvious. For example, target attacks had to be planned to avoid civilian casualties and avoid populated areas. Locks and dams were excluded from armed reconnaissance sorties. Some restrictions arose from the fear of escalating the war. Most were to avoid the risk of targeting Soviet personnel and equipment. Mining Haiphong harbor and its approaches was prohibited to prevent damage to Soviet shipping, even though the ships transported supplies for the war effort. Unless specifically authorized, a fighter could not pursue an enemy fighter, or MIG, to the point of attacking the air base supporting hostile aircraft. Soviet advisors lived at many of the fields.<sup>15</sup>

The Soviets were not the only fear of escalation. The memory of China's disastrous entry into the Korean conflict was still fresh in the mind of many Americans. So as not to entice Chinese involvement, planned tactics for conducting strikes and armed reconnaissance had to ensure aircraft flight paths did not approach closer than within 20 nautical miles of the Chinese border. If an aircraft was in 'hot pursuit' of an enemy aircraft, Sharp allowed the aircraft to go up to 12 miles from the Chinese border. Around Hanoi there was a prohibited area within a 10 nautical mile radius of the city center. Strikes were not authorized within this prohibited area unless the JCS had specifically approved the target. Photo reconnaissance and transit of the prohibited area was allowed. SAM sites, which could engage targets more than 20 miles away, within the prohibited area could not be attacked. The exact same restriction applied to Haiphong, but only for a 4 nautical mile radius from the city center. There was also a restricted area around Hanoi out to 30 nautical miles from the city center. Between 10 and 30 nautical miles from Hanoi, no strikes could be conducted without JCS permission except those on dispersed petroleum, oil, and lubricant (POL) sites. If a SAM in this area was

General James V. Hartinger Oral History, by Captain Barry J. Anderson, 5-6
 September 1985, 63, K239.0512-1673, IRIS No. 01095193, AFHRA
 "Chronology of Restraints," Air Operations North Vietnam, 1965-1967, K143.5072-90, IRIS #1000962, AFHRA.

preparing to fire and not located in a populated area, it was open for attack. If the SAM was in a populated area in this region, it could only be attacked once it fired. The North Vietnamese quickly derived these restrictions and tended to station both weapons and supplies in populated areas.<sup>16</sup>

In his tour debrief, Momyer recounted the difficulty of creating strategy within the provided complex constraints. His statements reflect a blend of frustration, reality, and ignorance. "Confronted with the severity of such political objectives," he wrote, "it was apparent that we had no real alternative but a war of attrition which we were in a better position to withstand than the enemy." If Momyer truly believed America as a nation was able to withstand a war of attrition better than the communist insurgent and regular forces in Vietnam is not known. Put simply, it was not and Momyer knew it. Militarily, America could lose personnel and equipment at the rate it had been for many years and still fight, but doing so would put North Vietnam no closer to defeat. Momyer felt the restrictions virtually mandated, "the design and articulation of the air campaign to continually wear the enemy down to the point he gave up by exhaustion." As restrictive or frustrating as the policies were, they did not mandate any specific approach to the war. There was room between the lines for an innovative leader of airpower.

Although Momyer had the ability to make strategy within the constraints of the system, the diluted lines of authority made the task even more difficult. In the air war in the north, Momyer essentially had four tiers of command above him: CINCPACAF, CINCPAC, the Secretary of Defense, and the President. "This problem made it very difficult to maintain a coherent, coordinated and flexible air campaign," he later wrote, "since constant pressures were being applied and the daily and weekly plans of action were intensively questioned." PACAF often lobbied Momyer for information before he had a chance to process it. "I suppose this dilemma will prevail as long as there are so many agencies in the chain of command between the source directing the overall conduct of a war and the intervening headquarters which interpret and pass down the detailed instructions. In my view, the line of authority, especially with an air campaign,

<sup>16</sup> "Reminiscences of Admiral U.S. Grant Sharp," Interviewed by Commander Etta Belle

Kitchen, Volume II, 499.

<sup>&</sup>lt;sup>17</sup> Momyer End of Tour Report, 1.

should have a minimum of agencies between the directing authority and the executing authority controlling the forces."18

Momyer's control and support of the airborne forces involved a complex and intricate system. Two control and reporting posts (CRP's) in the northern part of South Vietnam controlled the fighters as they left their bases in Thailand and South Vietnam. KC-135s lined up over Thailand and the Gulf of Tonkin to refuel the fighters. A C-135 orbited over the Gulf of Tonkin to act as a radio relay to ground stations in the south. An EC-121 served as both an ABCCC and as an airborne radar to relay instructions and provide warnings of airborne enemy aircraft. EB-66 aircraft provided electronic jamming to spoil the early detection and tracking capability of the North Vietnamese air defense system. Rescue helicopters moved into position at the Lima Sites, their forward alert bases in Laos. 19

The F-105s were Momyer's primary strike aircraft. The 355th Tactical Fighter Wing operated F-105s from Takhli Air Base in Thailand and the 388th Tactical Fighter Wing operated the aircraft from Korat Air Base, also in Thailand. The 8th Tactical Fighter Wing at Ubon, Thailand and the 432d Tactical Reconnaissance Wing at Udorn, Thailand operated F-4s in North Vietnam. The 366th Fighter Wing at Da Nang, the only unit Momyer actually commanded, rather than operationally controlled, for operations in the north, flew F-4s out of Da Nang in South Vietnam.

Although Momyer did not command the wings in Thailand, he wielded a great deal of influence on their command due to his position. As Lieutenant General James Wilson, the officer who served as the 13th Air Force Commander during the first year of Momyer's tour remembered, "there was very little official or direct coordination between me and the Seventh Air Force Commander because he would just go to his boss which was PACAF and say I wanted this and PACAF in turn would say, 'Get him this.'"<sup>20</sup> Since Momyer viewed his lack of command authority over the wings in Thailand as an annoyance, he exhibited little hesitation to use his informal authority in the hiring of wing

<sup>&</sup>lt;sup>18</sup> Momyer End of Tour Report, 3.

<sup>&</sup>lt;sup>19</sup> Airpower in Three Wars, 168-174.

<sup>&</sup>lt;sup>20</sup> Lieutenant General James W. Wilson Oral History, by Mr. Hugh N. Ahmann, 26-27 March 1984, 167, K239.0512-904, IRIS No. 1026127, AFHRA.

commanders. Much as he had done at other points in his career, Momyer worked hard to get the absolute best lineup of Airmen for his team. Not surprisingly, he wanted men with experience. One Airman who worked in Seventh Air Force remembered, "I have heard General Momyer quoted as saying that he didn't have time to train wing commanders in combat. He wanted wing commanders who had previously been wing commanders." He also wanted officers who he knew or at least knew by reputation. "You are giving us a lot of trouble by being so damned bullheaded and not taking people that we recommend for positions simply because you don't know them," General Dixon, then the commander of TAC, good-naturedly complained to Momyer. "We are about to run out of people here that can go to Southeast Asia that you know," Dixon continued in his personal letter, "you may not believe it, but there are a lot of good people in the Air Force that you don't know." With a good bit of senior officer humor but also a hint of scolding, Dixon concluded, "it came as quite a shock to me to find out that there were some that I didn't know."

Naturally, Momyer wanted to visit each of the wings in person to gain a perspective on their operation and their leaders. "On his first visit to Takhli," Colonel Jack Broughton, the Vice Wing Commander, recalled, "we put on our normal dog and pony show" briefing for Momyer on wing operations. "At the conclusion of the briefing, General Momyer told his accompanying staff to get lost and requested that those of us on the wing and plus a cross section of squadron commanders, flight commanders, and plain old GI fighter jocks gather with him for an additional exchange of ideas." As Broughton remembered, "when we entered the room we all snapped smartly to attention, whereupon he told us to drag up a chair, sit down, and relax, because he wanted to talk about tactics and operational procedures." Broughton distinctly remembered Momyer's next words, "Okay guys, how can we improve this operation and what should we do to fight the war better?" Momyer listened to the aviator's suggestions, and according to Broughton's memory, "within a matter of days we saw commonsense changes in the manner in which we were

<sup>&</sup>lt;sup>21</sup> Brigadier General Cleo M. Bishop Oral History, by Lt Col John N. Dick, Jr., 7-8 July 1976, 116, K239.0512-1581, AFHRA.

<sup>&</sup>lt;sup>22</sup> Letter from General Dixon to Lieutenant General Momyer, 8 December 1967, 168.7041-3, IRIS#01042242, AFHRA.

fragged that reflected what we had told the boss."<sup>23</sup> Broughton remembered many fighter pilots serving in Vietnam "openly rejoiced" when Momyer took command of Seventh Air Force. "He was an operational general, he knew fighters, he knew fighter pilots, and he knew fighter tactics."<sup>24</sup>

Colonel Robin Olds, the wing commander of the 8th Tactical Fighter Wing at Ubon and the son of the same Robert Olds who Momyer served with in his early days at Langley, called Momyer "a man for whom I felt deep respect." Describing Momyer, Olds recalled, "He wasn't an outgoing personality. He seldom revealed his feelings, but we all knew he worked tirelessly to get the job done." Momyer played a large role in hiring Olds to command the men at Ubon. The previous wing commander shied away from leading his men in combat missions. Momyer, who led many of his group's missions in World War II, valued leadership from the front of a strike package. He even received a monthly personal report of the combat missions flown by his wing commanders.<sup>25</sup> Momyer knew Olds would lead, on the ground and in combat. Although Momyer hired Olds, the two had personalities and charisma at opposite ends of the spectrum. Their differences made Olds' respect for Momyer even more telling. He respected a man who had the best interest of his men at heart. "We suspected," Olds wrote, "that he often served as a buffer blocking the idiotic blandishments coming out of Washington."26

Colonel, later Major General, John Giraudo, another officer Momyer placed in wing command, later recalled his first meeting with Momyer. "I saw a medium-sized erect older person, neat in appearance and precise in speech and mannerism. He spoke calmly in a low voice and I like him immediately. His directness, sincerity, and knowledge were magnetic."<sup>27</sup> At the end of their initial meeting, Momyer provided Giraudo with his marching orders. "I don't have to tell you we are fighting a war via detailed orders from the very top," Momyer

<sup>&</sup>lt;sup>23</sup> Jack Broughton, *Going Downtown: The War Against Hanoi and Washington* (Orion Books, New York, 1988), 106.

<sup>&</sup>lt;sup>24</sup> Jack Broughton, *Going Downtown: The War Against Hanoi and Washington* (Orion Books, New York, 1988), 105.

<sup>&</sup>lt;sup>25</sup> Major General John C. Giraudo Oral History Interview, by Lt Col Charles M. Heltsley,

<sup>8-12</sup> January 1985, p. 338, K239.0512-1630, IRIS #01105191, AFHRA.

<sup>&</sup>lt;sup>26</sup> Robin Olds, with Christina Olds and Ed Rasimus, *Fighter Pilot: The Memoirs of Legendary Ace Robin Olds* (St. Martin's Press, New York, 2010), 269.

<sup>&</sup>lt;sup>27</sup> Major General John C. Giraudo Oral History Interview, by Lt Col Charles M. Heltsley, 8-12 January 1985, p. 274, K239.0512-1630, IRIS #01105191, AFHRA.

said, "we may not like what we are doing or how we are being forced to do it, but we will do the best we can with what we are given." Turning to his personal expectations for Giraudo, Momyer stated, "I expect you to do the best you can. I appreciate you being here." Giraudo distinctly remembered Momyer's offers of support for him and for his wing. "If you ever have any problem I want to hear about it immediately," Momyer declared, "I want to support you in every way I can. Everyone is going to make mistakes. If you or any of your people ever violate any of the rules, I want you to tell me immediately, no matter the hour." Momyer concluded with great words for the ears of a commander, "I back my wing commanders completely, you can depend on that. And I want to depend on you."<sup>28</sup>

This brief meeting had a deep impact on Giraudo. "I couldn't have received better marching orders from a combat superior: do the best you can with what you have and follow the rules," he recalled, remembering the talk. "I came to love that man for his valiant efforts to fight a proper air war and for his unstinting support of me and my opinions, even when they differed from his."<sup>29</sup> After his tour under Momyer's command was complete, Giraudo recalled, "I felt truly honored to have served under him, and I told him so and darned if I didn't note some glisten in his eyes."<sup>30</sup>

These opinions and recollections by Momyer's senior leaders of the wings he had to send into the jaws of the dragon in Hanoi say a great deal about Momyer's leadership. He was credible, honest, and straightforward. Unlike Robin Olds, Momyer's leadership was not to become the stuff of Air Force lore. But, Momyer's honesty, sincerity, and consistency engendered respect and a deep sense of loyalty from his commanders. Those who cherished the gift but bore the burden of command with Momyer had a profound sense of admiration for the man who sent them into battle.

Momyer, however, like most men, was far from perfect. Colonel, later Lieutenant General, John Flynn, the Vice Wing Commander of the 388th

<sup>28</sup> Major General John C. Giraudo Oral History Interview, by Lt Col Charles M. Heltsley, 8-12 January 1985, p. 275, K239.0512-1630, IRIS #01105191, AFHRA.

<sup>&</sup>lt;sup>29</sup> Major General John C. Giraudo Oral History Interview, by Lt Col Charles M. Heltsley,

<sup>8-12</sup> January 1985, p. 275, K239.0512-1630, IRIS #01105191, AFHRA.

<sup>&</sup>lt;sup>30</sup> Major General John C. Giraudo Oral History Interview, by Lt Col Charles M. Heltsley, 8-12 January 1985, p. 358, K239.0512-1630, IRIS #01105191, AFHRA.

Fighter Wing, later remembered one of these miscues when Momyer visited Korat. "We convened our pilots and awaited the word from Mount Olympus. General Momyer came in - - he is a charming man, and he is a highly experienced officer - but I was waiting for some tremendous guidance, some insight, et cetera, and he stood up and, in his opening remarks, kind of shocked me." Flynn, who soon after Momyer's visit found himself as a prisoner of war in Hanoi for five years, remembered Momyer went into a lengthy discourse about having back up targets available because of the weather in North Vietnam. This was not news to tactical Airmen. Then Momyer talked about the politics of the war, "He finally got around to saying, in kind of a backward way, that we ought to be careful when we go on Pack 6, that no target in Pack 6 was worth one F-105... to me it was a great demonstration of the gap between the commander and his combat force."31 Momyer mistakenly believed the statement would show the men at Korat he cared and could identify with their frustrations over the way the war was being fought. But he missed a key element. These men were putting their lives on the line, and often paying the ultimate price, to destroy those targets near Hanoi. No one wanted to die for nothing.

The campaign the men fought against North Vietnam brought a new definition to the word 'piecemeal.' The stated goals of Rolling Thunder were "to reduce the ability of North Vietnam to support the insurgencies in South Vietnam and Laos," and, "to increase progressively the pressure on North Vietnam to the point where the regime would decide it was too costly to continue directing and supporting the insurgency in the South."<sup>32</sup> A DIA report written in the summer of 1966 found, after thousands of attack sorties from the beginning of the campaign until just before Momyer arrived, relatively light damage occurred and "North Vietnam reacted vigorously to restore transport

 $<sup>^{31}</sup>$  Lieutenant General John P. Flynn Oral History Interview, by Lt Col Arthur W. McCants, Jr., 28 Jan – 1 Feb 1980, 20 – 21 February 1980, p. 140, K239.0512-1187, IRIS #01104972, AFHRA.

<sup>&</sup>lt;sup>32</sup> Memorandum from William N. Morrell, Jr., of the Central Intelligence Agency to the President's Special Assistant (Rostow), Document 157, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966, available from http://history.state.gov/historicaldocuments/frus1964-68v04/d157.

facilities essential to maintaining the flow of supplies to the insurgency in South Vietnam."<sup>33</sup> It was not a campaign of any decisiveness.

The JCS worked diligently for the approval of more targets. Sequential sets of targets were approved under operations plans, named by number. Each target set represented a set of specific targets open to attack. By the time Momyer arrived in Saigon, Rolling Thunder 51 was approved for execution. The recently approved focused effort against the POL systems in North Vietnam became a part of Rolling Thunder 51. "Since the NVN transportation network is heavily dependent on the government-operated, POL-powered transport system," the Joint Chiefs had written to McNamara, "attacks on POL are required to reduce significantly the NVN ability to move war-supporting material within the country and southward through the infiltration routes." The President, in considering the inclusion of the POL targets revealingly stated, "In general, we should seek, with minimum loss and minimum danger of escalating the war, to achieve the maximum effect on the North Vietnamese." It was the way Rolling Thunder was fought throughout Momyer's tenure – minimum risk in the hope of maximum effect.

On June 28, the President cleared McNamara for the POL attacks with three simple words, "Go ahead, Bob."<sup>36</sup> Once Momyer took over orchestration of the attacks from Saigon, he came face to face with the difficulty of balancing effective attacks of key targets in the areas surrounding Hanoi with the restrictions governing the war. Momyer believed the North Vietnamese were moving their SAMs to develop a defensive belt. His aircraft were encountering

<sup>&</sup>lt;sup>33</sup> Memorandum from William N. Morrell, Jr., of the Central Intelligence Agency to the President's Special Assistant (Rostow), Document 157, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966, available from http://history.state.gov/historicaldocuments/frus1964-68v04/d157.

<sup>&</sup>lt;sup>34</sup> Memorandum from the Joint Chiefs of Staff to Secretary of Defense McNamara, Document 101, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966, available from http://history.state.gov/historicaldocuments/frus1964-68v04/d101.

<sup>&</sup>lt;sup>35</sup> Summary Notes of the 559th Meeting of the National Security Council, June 17, 1966, Document 159, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966, available from http://history.state.gov/historicaldocuments/frus1964-68v04/d159.

<sup>&</sup>lt;sup>36</sup> Editorial Note, Document 164, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966, available from http://history.state.gov/historicaldocuments/frus1964-68v04/d164.

almost complete SAM coverage between the Hanoi restricted area and the Chinese border zone. "Request you initiate action with CINCPAC," Momyer wrote to Harris, "in an effort to obtain relief from current operating restrictions." Momyer sought to reduce the Hanoi restricted area from 30 to 10 miles and the Haiphong restricted area from 4 miles to 3 miles. "The net effect of these recommendations will enable our strike forces greater freedom of action and protection," Momyer wrote, "they should also result in dispersion of enemy defense." <sup>37</sup>

One day later, after more action for his forces, Momyer again wrote to Harris, "our experiences of the past two days . . . provide further evidence for the requirement to reduce the restricted areas." Since many targets near Hanoi had only recently been cleared and aircraft were cleared for armed reconnaissance across all of North Vietnam except the restricted areas, Momyer felt a responsibility to inform his chain on the impact of restrictions on the operations. "With the continued development of the defensive complex our approach routes . . . will be more hazardous with the attendant dangers of inadvertent buffer zone penetrations," he concluded, "current rules are making it difficult for our pilots to defend themselves and simplify the NVN defensive problem."<sup>38</sup> The complaints fell on deaf ears. Either his superiors felt Momyer's grievances were the gripes of a new commander unfamiliar with the impact of political prerogatives or simply accepted the restrictions as a cost of doing business; the item was not considered above the PACAF level.

During July, the restrictions caused headaches, but only for the flights able to complete their missions. Poor weather during the month caused a cancellation of 70 percent of the attack sorties scheduled in North Vietnam.<sup>39</sup> Whenever bad weather caused Air Force fighters to cancel their sorties in RP6, they sought back up targets in areas with better weather. Due to the monsoon weather patterns, this meant the southern route packs. Because Momyer controlled RP1 through his position as Westmoreland's air component commander, he initially diverted Air Force strike aircraft there. With missions

<sup>&</sup>lt;sup>37</sup> Message from Momyer to Harris, 0553Z, 08 July 1966, K740.1623-5, AFHRA.

<sup>38</sup> Message from Momyer to Harris, 09 July 1966, K740.1623-5, AFHRA.

<sup>&</sup>lt;sup>39</sup> Jacob Van Staavern, "USAF Plans and Operations, The Air Campaign Against North Vietnam, 1966," USAF Historical Division Liaison Office, January 1968, 38.

already planned in that area in support of Tally Ho, the weight of effort in RP1 was well out of proportion with the Navy controlled regions. Momyer sought and gained approval to divert Seventh Air Force strikes at the level of 1,500 sorties per month into RP2, 3, and 4. Momyer had gained some headway in correcting the geographic exclusion of airpower's flexibility. It was, however, not all Momyer wished for, even in this limited arena. To ensure continued deconfliction between Navy and Air Force aircraft, the Air Force assets could only attack on the western side of the Navy owned areas, excluding the lucrative interdiction targets on the coast from Air Force attack.<sup>40</sup>

Despite the weather and diverted sorties, by the end of July, a DIA study found air attacks caused 70% destruction of the POL storage capacity in North Vietnam. Although this represented a great amount of destruction, the residual capacity of the POL system was still well above communist requirements.<sup>41</sup> More sorties were required. Momyer's forces, however, fared no better for weather in August. Momyer's 'no go' decisions in the morning combined with real time decisions made by mission commanders, resulted in an 81 percent sortie cancellation rate for the month.<sup>42</sup>

The sorties flown with good weather paid a high price for attacking targets near Hanoi. On August 7th, anti-aircraft artillery downed six Air force jets and one Navy aircraft. It was the most aircraft lost on a single day since August of 1965. Attrition was decreasing, but the numbers were still alarming. United States forces experienced 41 aircraft losses in July, 37 in August, and 26 in September – eighty of these losses, or 77%, were Momyer's aircraft.<sup>43</sup> The F-105 wings were the hardest hit. In July and August of 1966, thirty-nine F-105s were lost during attacks of North Vietnam. Some were two seat versions of the aircraft. Thirty-four of the F-105 losses were due to AAA fire, three were due to SAMs, and one was a result of aerial combat. Although only three aircraft were lost to SAMs, the statistics do not and cannot capture how many

<sup>&</sup>lt;sup>40</sup> Jacob Van Staavern, "USAF Plans and Operations, The Air Campaign Against North Vietnam, 1966," USAF Historical Division Liaison Office, January 1968, 36.

 <sup>&</sup>lt;sup>41</sup> Pentagon Papers, Gravel Edition, Air War in the North: 1965-1968, Volume 1, 141.
 <sup>42</sup> Jacob Van Staavern, "USAF Plans and Operations, The Air Campaign Against North Vietnam, 1966," USAF Historical Division Liaison Office, January 1968, 38.

<sup>&</sup>lt;sup>43</sup> Jacob Van Staavern, "USAF Plans and Operations, The Air Campaign Against North Vietnam, 1966," USAF Historical Division Liaison Office, January 1968, 38.

of the F-105s were reacting to SAM firings when AAA downed their airplanes. In their SAM reactions, the pilots had to take their aircraft down to low altitude, putting their aircraft in the lethal envelope of AAA fire. In a credit to helicopter rescue forces, sixteen of the aviators in downed airplanes were rescued. Fifteen aviators became POWs and thirteen paid the ultimate price.<sup>44</sup>

Recalling this particular period, Lieutenant Ed Rasimus, now a noted author and then an F-105 pilot from Korat, later remembered, "During four months of 1966, I briefed each day for missions into NVN with a group that typically consisted of four or five flights of four aircraft--a total of around 25 pilots at a time." On each on these flights, Rasimus recalled, they lost an average of one pilot of the 25 they briefed with that morning. The cycle repeated each day. Start the day with 25 aviators in the briefing room and end the day with 24. In the six months it took Rasimus to fly his 100 missions north, his wing lost, "110% of the aircraft assigned and 60% of the pilots who started the 100 mission tour didn't finish."<sup>45</sup>

Brigadier General W. D. Dunham, Momyer's deputy for operations, commented on the summer attrition rates in his end of tour report. "In the mid and late summer of 1966 the enemy had achieved air superiority in the skies of his heartland," he wrote. "The SAM's were forcing us into the vulnerable 4,500 foot area, the MIG attacks were being pressed with determination, causing us to jettison ordnance en route to the target and his Air Defense Control System was completely integrated and functioning with precision." This was hardly air superiority for the North Vietnamese, but it was much less than air superiority for Momyer's men. They were operating in highly contested airspace. To add insult to injury, the campaign against POL was not having decisive effects. The enemy dispersed POL storage into smaller and more widespread sites while the imports from China and the Soviet Union continued. The attacks also provided

<sup>&</sup>lt;sup>44</sup> Catalog of F-105 Combat Losses, available from http://www.burrusspta.org/395 Combat.pdf

<sup>45</sup> Ed Rasimus, website post, http://yarchive.net/mil/vietnam\_air\_losses.html.

<sup>&</sup>lt;sup>46</sup> "The War in Vietnam: January – June 1967," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 29 April 1968, 111.

Ho Chi Minh an opportunity to garner even more support from his communist backers.<sup>47</sup>

In his book, Momyer was quite frank about this period of high attrition. He detailed a lack of electronic counter measures (ECM) equipment, or pods, for each aircraft. This equipment made a large difference. The majority of Navy aircraft had ECM pods and in a relatively equal number of sorties in the north, lost 84% fewer aircraft.<sup>48</sup> Some of Momyer's aircraft also lacked radar homing and warning (RHAW) equipment to warn of imminent attack. "Those early missions," Momyer wrote, "were planned with great detail and less freedom of action for the strike forces because of the initial uncertainty about how best to operate in a SAM environment with acceptable losses." Put another way, Seventh Air Force was not prepared, trained, or equipped to sustain operations against North Vietnam. Changes needed to be made, and quickly.

Momyer's inability to raise the restrictions and the high attrition rates against targets that had little strategic impact greatly affected him. "We couldn't afford to accept high losses," he later wrote, "if there were no opportunities for a series of decisive blows and I never considered we were given such an opportunity because of targets withheld and the gradual release of targets." Momyer did feel high losses were acceptable over a short period of time if the damage done could force the enemy out of the war. "We never had the targets for such a condition vis a vis the enemy," Momyer concluded, "therefore, the day to day losses had to be closely controlled so as to maintain the morale of the force and preserve adequate levels of aircraft to sustain the effort." 50

As August drew to a close, Momyer attempted to break up some of the predictability of the F-105 strikes. He recommended a pre-sunrise takeoff from Korat to be ready for a strike as the sun came up over the Red River Delta. The sortie was flown with limited success, but the early morning operations brought

<sup>&</sup>lt;sup>47</sup> Pentagon Papers, Gravel Edition, Air War in the North: 1965-1968, Volume 1, 141-144

<sup>&</sup>lt;sup>48</sup> Wayne Thompson, *To Hanoi and Back: The United States Air Force and North Vietnam*, 1966-1973 (Smithsonian, Institution Press, 2000), 48.

<sup>&</sup>lt;sup>49</sup> Airpower in Three Wars, 247.

<sup>&</sup>lt;sup>50</sup> Momyer End of Tour Report, 2.

another level of risk to an already risky mission.<sup>51</sup> About the same time, the JCS submitted their proposal for Rolling Thunder 52 to McNamara. It requested an expansion of the target sets to include more high value targets around Hanoi and Haiphong. It also finally included the change in the restricted areas Momyer had requested. McNamara did not approve the package but held it for consideration. On August 30th, the Institute of Defense Analysis' JASON Summer Study Group, an independent scientific advisory group, submitted a report to McNamara. "We as a group," the report read, "have grave doubts about the usefulness of continuing and expanding Rolling Thunder as one of the military instruments for speedier termination of the war in the South."<sup>52</sup>

At the end of September a joint staff study group released the Hise Report on aircraft attrition. Named after Marine Colonel Henry W. Hise, the director of the task force, the group's major conclusion cited a recent observation of Momyer. "In the past three months the enemy has moved to a new plateau of air defense capability," Momyer's quote read, "he now has a fully integrated air defense system controlled from a central point in Hanoi."<sup>53</sup> The enemy, however, was not resting on their laurels. In the words of an official Vietnamese history recounting the attacks near Hanoi, "The flames from the fires at the Duc Giang petroleum tank farm and our poor performance in this battle caused much thought and severe self-criticism among commanders at all levels." The communists believed their own Air Defense Command's reporting system was slow and ineffective and had to be improved.<sup>54</sup>

Another joint CIA and DIA report published in September found Rolling Thunder's 73,000 sorties to date had accomplished very little headway in destroying North Vietnam's will or their capability to support the insurgency. Even with the stepped up interdiction against rail lines provided for in Rolling

<sup>51</sup> "Rolling Thunder: July 1965 – December 1966," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 15 July 1967, 84.

<sup>&</sup>lt;sup>52</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 36-4.

Jacob Van Staavern, "USAF Plans and Operations, The Air Campaign Against North Vietnam, 1966," USAF Historical Division Liaison Office, January 1968, 52-53.
 Merle Pribbenow, "The 'Ology War: Technology and Idealogy in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003, 180.

Thunder 51, "NVN had maintained its transport capacity at the level required to meet its essential economic needs and to continue its logistic support of the military effort in RVN and Laos." Intelligence analysts could only reasonably assess two rail lines as interdicted. The other three were believed to be operable and functioning at capacity.<sup>55</sup>

In response to the Hise report, Sharp told the JCS there was a need to reorient air strikes to destroy enemy's materiel or his means of producing it. Sharp felt a reorientation of the effort would take sorties away from rail lines north of Hanoi where the majority of losses were taking place. He felt a change in the target pattern was the only way to get improvement in attrition.<sup>56</sup> The JCS relayed Sharp's beliefs to McNamara, "By striking targets that are more vulnerable and of greater value to the warmaking capability of the enemy and by reducing geographic restrictions, better results can be obtained with significantly fewer sorties and less attrition."<sup>57</sup>

In a tribute to the disjointed nature of the air war in North Vietnam, in late September, Sharp told Momyer and his other senior leaders he did not expect a change in targets until there was proof the POL targets had been destroyed. The DIA said there was still residual capacity at some of the key facilities. By this time, there were a number of intelligence estimates stating the POL campaign was not working, but the game of target approval required their destruction in order to get new targets. The problem lie not only in the focus on destruction rather than the effect of the attacks, but also the lack of coherency in a campaign that was driven by the military quest for 'better' targets in the current conflict and the political quest to minimize risk to a broader conflict. The interaction of the two desires resulted in a focus on target destruction instead of strategic effect.

<sup>&</sup>lt;sup>55</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 36-5.

<sup>&</sup>lt;sup>56</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 36-8.

<sup>&</sup>lt;sup>57</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 36-10.

<sup>&</sup>lt;sup>58</sup> "Rolling Thunder: July 1965 – December 1966," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 15 July 1967, 85.

This lack of coherency was partial motivation for Momyer's September request for operational control of all air strikes in North Vietnam. Momyer believed his chairmanship of the coordinating committee "was not promoting mutual support." Others also worried about the implications. Wheeler expressed his concerns to Sharp in a September letter. Sortie rate prescriptions, Wheeler feared, were causing a competition between the Navy and Air Force in North Vietnam. Sharp denied the race, defended his control setup, and asked for more targets, "What this campaign needs more than anything else is permission to strike some good targets, of which there are plenty; as you well know." 60

For Momyer, targets were important, but there was more. "Although the committee was acting under its charter," Momyer wrote, "it couldn't direct either force to modify its operations or to schedule strikes at different times." Sharp refused to look inward for change. Using the bravery of his pilots for his argument, Sharp told Wheeler, "They are performing superbly with one hand tied behind their back . . . the only continuing complaint I have heard . . . concerns the restrictions imposed and their firm belief that air power is not being used at its full effectiveness. In these thoughts I concur." Sharp had not considered airpower's effectiveness might also be hampered by his own setup for operational control.

Although Sharp was a joint forces commander, he was also a career Navy officer. Operational control of air assets was as emotional an issue for the Navy as it was for the Air Force. Admiral John J. Hyland who served as both TF-77 Commander and CINCPACFLT during Momyer's tenure, exposed this emotion in reminiscences after retirement. Addressing the potential impact of Air Force central control of air operations, Hyland stated, "We could see that again, we'd have a situation very similar to the one in Korea, where they did have control of all the air strikes, and what happened was they did their best to give the Navy

<sup>59</sup> Airpower in Three Wars, 110.

<sup>&</sup>lt;sup>60</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 36-11.

<sup>61</sup> Airpower in Three Wars, 110.

<sup>&</sup>lt;sup>62</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 36-11.

the poorest and least important strikes and take the most profitable ones for themselves." Therefore, Hyland believed, "the Navy has always been worried about getting itself under somebody else's control and not being able to operate the Navy to its best effectiveness." Admiral Roy L. Johnson, who was Hyland's boss as CINCPACFLT from 1965-1967, recalled an arrangement where naval officers sat as liaisons in Momyer's headquarters, Johnson said, "We were spying on them. Well, in effect, we were, and we had good reason to be. These guys would cut you out of the pattern if you didn't watch them . . . they were so narrow-minded." Suspicion and division ran deep in many of these relationships. Sharp denied Momyer's request for control but it did not end the debate.

Discontent was rampant in late 1966. Sharp and Momyer were not alone. McNamara was also unhappy, but for another reason. He did not believe airpower efforts against North Vietnam were substantively adding to the war effort. In an October memo to the President, McNamara wrote, "It is clear that, to bomb the North sufficiently to make a radical impact upon Hanoi's political, economic and social structure, would require an effort which we could make but which would not be stomached either by our own people or by world opinion; and it would involve a serious risk of drawing us into open war with China." On the continuing quest of the JCS to expand the attacks, McNamara wrote, "When this marginal inutility of added sorties against North Vietnam and Laos is compared with the crew and aircraft losses implicit in the activity, I recommend as a minimum, against increasing the level of bombing of North Vietnam and against increasing the intensity of operations by changing the areas or kinds of targets struck."65 McNamara also recommended either a total bombing halt of all of North Vietnam or, less drastically, a shift of US effort outside of RP6 with a refocus of these sorties to the infiltration routes in RP1 and 2.66

<sup>&</sup>lt;sup>63</sup> "The Reminiscences of Admiral John J. Hyland, Jr., U. S. Navy (Retired), Volume II," (U.S. Naval Institute, Annapolis, Maryland, 1989), 379.

<sup>&</sup>lt;sup>64</sup> "The Reminiscences of Admiral Roy L. Johnson, USN (Ret.)," (U.S. Naval Institute, Annapolis, Maryland, 1980) 310.

<sup>65</sup> Pentagon Papers, Gravel Edition, Air War in the North: 1965-1968, Volume 1, 163.

<sup>&</sup>lt;sup>66</sup> Pentagon Papers, Gravel Edition, Air War in the North: 1965-1968, Volume 1, 165-66.

The JCS responded strongly and directly to McNamara on his advice to the President. "The Joint Chiefs of Staff do not concur in your recommendation that there should be no increase in level of bombing effort and no modification in areas and targets subject to attack," they wrote. "To be effective, the air campaign should be conducted with only those minimum constraints necessary to avoid indiscriminate killing of the population." On McNamara's proposal for a bombing halt, the JCS predicted no benefits. The JCS, "believed that the likelihood of the war being settled by negotiation is small, and that, far from inducing negotiations, another bombing pause will be regarded by North Vietnamese leaders, and our Allies, as renewed evidence of a lack of US determination to press the war to a successful conclusion." The bombing, according to the JCS, was one of the President's two trump cards. The other was the presence of American troops in South Vietnam. The bombing trump card, "should not be given up without an end to the NVN aggression in SVN." 68

There is no record of McNamara's response to the letter. Just one day later, however, before a meeting of the National Security Council, McNamara and Wheeler met with the President to discuss their differences.<sup>69</sup> From Wheeler's recollections of this meeting, the President seemed receptive to bombing a few targets of greater worth but not to decreasing the buffer zones around Hanoi and Haiphong. Wheeler directed Sharp, who would soon see the President at a conference in Manila, to tell Johnson, "We should continue to increase pressures rather than staying on a level or decreasing effort."<sup>70</sup>

After these heated discussions, the Air Force surprisingly recommended an interdiction program to lessen the weight of effort in RP6. In September, McConnell directed the Air Staff to determine if an aerial blockade could stop

<sup>&</sup>lt;sup>67</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 36-13.

<sup>&</sup>lt;sup>68</sup> Pentagon Papers, Gravel Edition, Air War in the North: 1965-1968, Volume 1, 166-167.

<sup>&</sup>lt;sup>69</sup> Summary Notes of the 565th Meeting of the National Security Council, October 15, 1966, Document 272, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966, available from http://history.state.gov/historicaldocuments/frus1964-68v04/d272.

<sup>&</sup>lt;sup>70</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 36-14.

the infiltration of men and material from North Vietnam. The impetus of the study was Momyer's request for an integrated interdiction program shortly after his arrival. The plan became known as 'Combat Beaver.' It consisted of four interdiction 'belts,' like beaver dams, staggered through North Vietnam. "If each of four such exposures extracts 30% attrition," the official memo on the program read, "only 24% of the input will survive to the output." The central idea was to force the enemy to use specific LOC's through the bombing of alternate paths. Once the enemy used this LOC, aircraft would interdict it with airstrikes and then provide follow-up harassment attacks with area denial munitions to impede the repair of the LOC. Momyer's concept of B-52 operations played a key role. The B-52s were to fly 24 hour racetrack orbits above key points in the system and drop a bomb every 12-15 minutes, all day and all night. The bombers would also employ time delay munitions to provide long-term harassment of LOC repair efforts. Combat Beaver was to be an intense and relentless attack program against carefully selected and planned targets within the enemy's transportation system.<sup>71</sup>

At first glance, Momyer's views on interdiction seem contradictory to the Beaver concept. Other writers have mistakenly set Momyer out of synch with Air Force views. The misunderstanding is easily made. The Beaver concept held, "The density of the transport network in the Route Packages V and VI area is too high for us decisively to inhibit the flow of material even though the required flow is several thousand tons per day. For maximum effect, Momyer believed efforts, "had to begin with attacks on the head of the system in North Vietnam. The Beaver plan did not advocate massive attacks on the head of the system because, "The LOC distances are shorter, the capacities greater, the choke points harder to establish than in Route Packages I through IV and in Laos. Most important, the LOCs in Route Packages V and VI are contiguous to

<sup>&</sup>lt;sup>71</sup> Memorandum for the Deputy Secretary of Defense, from Dr. Harold Brown, Secretary of the Air Force, Subject: The Value of Bombing North Vietnam, 10 November 1966, K168.024-9, IRIS #01114991, AFHRA.

<sup>&</sup>lt;sup>72</sup> See, for example, Wayne Thompson, *To Hanoi and Back: The United States Air Force and North Vietnam, 1966-1973* (Smithsonian, Institution Press, 2000), 29.

<sup>&</sup>lt;sup>73</sup> Memorandum for the Deputy Secretary of Defense, from Dr. Harold Brown, Secretary of the Air Force, Subject: The Value of Bombing North Vietnam, 10 November 1966, K168.024-9, IRIS #01114991, AFHRA.

<sup>&</sup>lt;sup>74</sup> Airpower in Three Wars, 195.

the buffer zone and CHICOM border and are therefore afforded an unlimited and uninterdicted input capacity versus the LOCs in Laos and adjacent to the DMZ in NVN, whose inputs must suffer the results of the continuing interdiction program in Route Packages I through IV."<sup>75</sup> Momyer and the Beaver Plan found agreement in the panhandle of North Vietnam. "Approximately 30% of the important transportation targets were in Route Packages IV, V, and VI," Momyer wrote, essentially in agreement on the importance of targets in RP4.<sup>76</sup>

Beaver did not eliminate targets in RP6, but did not view them in classic interdiction terms. "In the development of the targets for the target systems, emphasis should be placed on the importance of their functional relationship to infiltration." This put the campaign in line with the stated objectives of Rolling Thunder. "The purpose of the Route Packages V and VI strikes would then be on targets connected functionally (e.g., cement, POL, steel, RR yards, truck repair) rather than geographically with interdiction."<sup>77</sup> Although the concept for Beaver did not mention Haiphong, it also fit into the model.

The mechanism for North Vietnamese capitulation to negotiations in the Beaver plan was a loss of will of the North Vietnamese people to continue in South Vietnam in light of the quantity of losses in the north and the "diminishing prospects of success in SVN." The designers were honest in their prognostications of success. "We cannot predict the effectiveness of this attempt to erode the will," they wrote, "since NVN is a non-industrial economy, the difficulties created for them will not seem as great to them as those felt by the Germans or the Japanese in World War II." The best assessment they could offer for Combat Beaver was it "may very well have an effect." This overall view of the goal of Beaver was solidly Momyer in concept. "To reduce the flow as much as possible and to make his price painfully high," Momyer later wrote,

<sup>75</sup> Memorandum for the Deputy Secretary of Defense, from Dr. Harold Brown, Secretary of the Air Force, Subject: The Value of Bombing North Vietnam, 10 November 1966, K168.024-9, IRIS #01114991, AFHRA.

<sup>&</sup>lt;sup>76</sup> Airpower in Three Wars, 196.

<sup>&</sup>lt;sup>77</sup> Memorandum for the Deputy Secretary of Defense, from Dr. Harold Brown, Secretary of the Air Force, Subject: The Value of Bombing North Vietnam, 10 November 1966, K168.024-9, IRIS #01114991, AFHRA.

<sup>&</sup>lt;sup>78</sup> Memorandum for the Deputy Secretary of Defense, from Dr. Harold Brown, Secretary of the Air Force, Subject: The Value of Bombing North Vietnam, 10 November 1966, K168.024-9, IRIS #01114991, AFHRA.

"we must focus our campaign upon the most vital supply targets: factories, power plants, refineries, marshaling yards, and the transportation lines that carry bulk goods."<sup>79</sup>

This concept foreshadowed Colonel John Warden's concept of distant interdiction and Robert Pape's concept of strategic interdiction mentioned in earlier chapters. Maybe most importantly, and the part of the Combat Beaver concept Momyer undoubtedly stressed, the plan maintained Seventh Air Force operational control was the best way to orchestrate the integrated operations by Navy and Air Force assets to achieve the objectives.

In early November, Momyer's predecessor, Lieutenant General Joe Moore, now the vice commander of PACAF, delivered the Combat Beaver concept brief to Sharp. The admiral was not pleased. Sharp did not think the plan emphasized the primary purpose of Rolling Thunder, which, in his view, was to punish the enemy so that he would lose the will to continue support of the war in the south. Sharp believed it would be very difficult to justify a strike program in North Vietnam based purely upon interdiction, especially since there were numerous studies circulating on the inability of interdiction to stop infiltration. Rather than interdiction, Sharp continued to believe pressure on worthwhile targets' would cause the North to give up their involvement in the South. In Sharp's mind, it was difficult to tell the extent to which air strikes were working until the enemy called it quits. His only real measure of strategic effectiveness was capitulation. Combat Beaver, Sharp thought, fell into the camp of those who believed the US could limit our objectives to stopping enemy infiltration, rather than applying pressure where it hurts.<sup>81</sup>

In what was likely a one way conversation, Sharp laid out his conceptual foundations of the air campaign. In the use of airpower to coerce the enemy, Sharp was a firm believer in the theory of punishment rather than denial. Robert Pape best captured these two concepts in a single sentence, "Punishment threatens to inflict costs heavier than the value of anything the

<sup>&</sup>lt;sup>79</sup> Airpower in Three Wars, 378.

 <sup>80</sup> John Andreas Olsen, John Warden and the Renaissance of American Air Power (Potomac Books, Washington, D.C., 2007), 70; Robert A. Pape, Bombing to Win: Air Power and Coercion in War (Cornell University Press, Ithaca, New York, 1996), 75.
 81 "Combat Beaver Briefing for CINCPAC," Msg to Gen Compton, USAF, from CINCPACAF (080520Z), 8 November 1966, K717.312-59, IRIS #01085704.

challenger could gain, and denial threatens to defeat the adventure, so that the challenger gains nothing but must still suffer the costs of the conflict."82 Sharp's view of airpower was in line with the theories of Giulio Douhet and strategic bombing advocates who believed destroying the right targets could cause capitulation. Momyer, a theater Airman, viewed the campaign not only in terms of how it would affect the political objectives of the ground war in the South but also how the destruction of systems of these targets could show the enemy their own strategy for victory in the south could not succeed.

With Sharp's conceptual foundations on the table, the environment turned hostile as the discussion turned to operational control of Combat Beaver operations. To Sharp, it appeared the Air Force wanted operational control of RP2, 3, 4. Without hesitation, Sharp stated emphatically he would never permit such an arrangement. For Sharp, control was not the issue; it was merely the amount of weight that needed to be placed in each area. He believed the current setup was more than ample to accomplish the objective. Moore objected. Although Momyer had gained permission to divert sorties into RP2, 3, and 4, his aircraft were restricted west of Route 15. The most lucrative interdiction targets lie along the coast, east of Route 15. In addition, the mountains in the west part of the Navy route packages were often covered with clouds. Momyer's jets were already on their second set of targets when they reached these areas, and they often had to look for a third instead of being able to drop ordnance on viable targets along the coast.<sup>83</sup>

Admiral Johnson then spoke up. From Moore's account of the exchange, the conversation quickly degenerated into a shouting match. Johnson sensed the Air Force wanted the system to match the one used in Korea. He not only strongly opposed that idea but also inflamed the discussion by asking Moore why the Air Force wanted to fly in the southern Navy areas instead of RP5 and 6A. His insinuation was clear: the Air Force should stop worrying about control and start getting down to business to accomplish the mission.<sup>84</sup>

<sup>&</sup>lt;sup>82</sup> Robert A. Pape, *Bombing to Win: Air Power and Coercion in War* (Cornell University Press, Ithaca, New York, 1996), 7.

 <sup>83 &</sup>quot;Combat Beaver Briefing for CINCPAC," Msg to Gen Compton, USAF, from CINCPACAF (080520Z), 8 November 1966, K717.312-59, IRIS #01085704.
 84 "Combat Beaver Briefing for CINCPAC," Msg to Gen Compton, USAF, from CINCPACAF (080520Z), 8 November 1966, K717.312-59, IRIS #01085704.

By this point, Sharp grew tired of the arguments he had heard for many years and told both Johnson and Moore he was fed up with complaints about the current system. The conversation did spark Sharp's interest on the coastal areas, however. He wanted the Air Force to be able to flex to targets in those areas as well as the western portions. He ordered both sides to get to work to make the best of the current arrangements; otherwise those who were trying to eliminate Rolling Thunder would succeed.<sup>85</sup>

After his tour in Vietnam, Momyer described Sharp's command arrangements as, "so cumbersome it is difficult to employ the forces so as to achieve the most effective results," because, "too many critical decisions are dependent upon coordination rather than command." Perhaps no episode drives this home more soundly than the conversation over Combat Beaver. When the air campaign in North Vietnam was floundering and McNamara was doubting airpower's effectiveness, the only decision on airpower was not made by a component commander, but by the unified commander, and it was not helpful: make it work.

In Sharp's debrief of the episode to Wheeler, he found more of a middle ground than he had in the briefing with Moore and Johnson. Sharp believed Combat Beaver was basically the same as the current concept because it called for an intense campaign. He claimed, however, the emphasis on interdiction would upset what he believed to be a well-balanced program. Sharp felt the balance of the current program existed between interdiction targets and a broadened target base. "The primary method available to us for increasing effectiveness," Sharp wrote, "is not intensifying the interdiction program, but striking highly lucrative source targets."87

Sharp was writing his own ticket to failure. Instead of orchestrating a campaign within the political constraints he had been given, he relied upon gaining access to the 'highly lucrative source targets.' In effect, Sharp's strategy relied upon targets he had no access to. Momyer later wrote, "Regardless of the capability of PACOM, the constant changing and shifting of targets made it

 $<sup>^{85}</sup>$  "Combat Beaver Briefing for CINCPAC," Msg to Gen Compton, USAF, from CINCPACAF (080520Z), 8 November 1966, K717.312-59, IRIS #01085704.

<sup>86</sup> Momyer End of Tour Report, 3.

<sup>&</sup>lt;sup>87</sup> "Combat Beaver," Msg to JCS, from CINCPAC (282330Z), 28 November 1966, K712.312-30, IRIS #01065746, AFHRA.

imperative to have the agency responsible for command decisions located near the forces." It seems Momyer may have missed the point. Through the conversations on Combat Beaver, it becomes apparent as much blame could be placed upon Sharp for the "changing and shifting of targets," as could be placed upon the President and the Secretary of Defense. Momyer believed, "PACOM was really limited to the role of dividing the targets between PACAF and PACFLT and establishing the time when the targets would be struck." For Sharp, the air war was targets, and gaining access to more valuable targets. As Momyer said, "PACOM in a true sense was not in a position to direct the air war nor in a position to accomplish the detailed coordination which was necessary between the Air Force and the Navy." 88 He was also disinclined to provide strategic direction within the constraints he was provided.

In a memo to McNamara, the JCS made the best case for a comprehensive and focused interdiction campaign. To be sure, they also continued to advocate a broadened target base, but their views of interdiction provided backing for the Beaver concept. "The measure of the effectiveness of the interdiction effort is the infiltration and its consequence which would be taking place if the air campaign were not being conducted," the memo read. "The cost to the enemy is not solely to be measured in terms of loss of trucks but in terms of lost capability to pursue his military objectives in SVN."89 It would be counterfactual to argue the concepts of Combat Beaver would have resulted in a decisive air campaign under the given political constraints. In his book, Momyer wrote, an Airman's "professional responsibility is to articulate the probable consequences of his alternative courses of action to his superiors and then to act as effectively as possible within the instructions he is given." Momyer emphasized that, "an extremely high premium must be placed on the airman's ability to articulate options thoroughly and clearly."90 Unfortunately, there were too many layers between Momyer and those above for him to communicative that a comprehensive interdiction campaign without access to the sources could hold the war in the south to a level of violence that would provide American military superiority in South Vietnam. Although many

<sup>88</sup> Momyer End of Tour Report, 4.

<sup>89</sup> Pentagon Papers, Gravel Edition, Air War in the North: 1965-1968, Volume 1, 173.

<sup>&</sup>lt;sup>90</sup> Airpower in Three Wars, 379.

authors later used the Tet Offensive as proof the interdiction campaign was failing, it actually proved the opposite. Despite their best efforts, the communists could not deploy, supply, or equip the required forces to gain a decisive military victory in the south. The security of the people in the south would not be gained by airpower, but enabled by airpower's support of ground forces protecting the south from an invasion from the north, which provided security for a comprehensive pacification program.

Despite McNamara's disillusionment with the Rolling Thunder results, the President approved a more comprehensive target package in November. Rolling Thunder 52 included canal water locks, POL storage areas, manufacturing and electrical power plants, and SA-2 support facilities in RP5, 6A, 6B.91 As a testament to the disjointed nature of target clearances, the President authorized a steel plant, a cement plant, and two Haiphong thermal power plants for only one week. After that period, the targets had to be cleared again. Given these constraints, Wheeler decided to pull the targets altogether until a later date. "The decision to defer attack of these targets," he wrote to Sharp and Westmoreland, "came as the result of a further conference this morning reassessing the factors concerned with U.K. Foreign Minister George Brown's forthcoming visit to Moscow and the political sensitivity of U.K. – Soviet Co-chairmanship." In the same message, Wheeler wrote, "I request that you instruct your public affairs officials and others who may be in contact with the press to refrain repeat refrain from depicting to the public the attacks authorized in Rolling Thunder 52 as being a substantial increase in the level of our campaign against North Vietnam." Clarifying his reasons, Wheeler wrote, "Escalation has become a dirty word; and such charges, true or false, impose further inhibitions here against moving ahead to win this war."92

The northeast monsoon stifled any worries Rolling Thunder 52 might look like escalation. In contrast to the 12,154 sorties flown in September, U.S. forces flew only 7,252 sorties in November. Although December's total of 6,732

\_

Westmoreland Papers, CMH.

 <sup>&</sup>lt;sup>91</sup> Jacob Van Staavern, "USAF Plans and Operations, The Air Campaign Against North Vietnam, 1966," USAF Historical Division Liaison Office, January 1968, 59.
 <sup>92</sup> Message from Wheeler to Westmoreland and Sharp, 111708Z, 11 November 1966, William C. Westmoreland Message File, COMUSMACV, 1 Oct – 31 Dec 1966, William C.

was even lower, accusations of 'escalation' ran rampant.<sup>93</sup> In December the air war reached a new level and the bluntness of the airpower tool for diplomacy became apparent. Momyer played a large role in that display.

Although the JCS was on record stating the chance the conflict would be settled by negotiations was small, the President held on to the hope the risk of more bombing would bring Hanoi to accept peaceful negotiations.94 The JCS had good reason to be skeptical about the chance for peace. Since 1965, Hanoi officials had four conditions for peace on their terms. First, they wanted recognition of the rights of the people of Vietnam to unity, sovereignty, and territorial integrity. This condition included a withdrawal of all American forces as well as a cessation of military activity within its borders. The second condition was strict adherence to the military provisions of the 1954 Geneva agreements, meaning there were to be no alliances, foreign bases or personnel in South Vietnam. Third, they desired the internal affairs of the country to be settled by the Vietnamese people without foreign intervention and in accordance with the NLF program. The last condition was that the people of Vietnam were to decide their own terms for the peaceful reunification of the country. Since the start of the conflict, the President repeatedly said the US was willing to take steps toward peace, but only if the other side was willing to cease its aggression against South Vietnam. The President's vision was an independent South Vietnam.95

Although there were many peace negotiation efforts throughout the war, the two sides, whose positions seemed untenable to the other, had yet to come to an agreement to even have a discussion. The secretive efforts to set up peace discussions in December of 1966 displayed the interaction between Rolling Thunder operations and potential peace efforts. Polish efforts to broker peace talks between the two opposing sides, code-named Marigold, were in high gear as Momyer waited for the weather to clear over North Vietnam. There were still

<sup>&</sup>lt;sup>93</sup> Jacob Van Staavern, "USAF Plans and Operations, The Air Campaign Against North Vietnam, 1966," USAF Historical Division Liaison Office, January 1968, 59.

<sup>&</sup>lt;sup>94</sup> Joint Chiefs of Staff History of Vietnam War: 1965-67 – Efforts Toward Negotiation – The Truce Periods 1966, 1 July 1970, p. 39-22, Folder 03, Box 01, Joint Chiefs of Staff History of the Vietnam War, 1965-1967, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>95</sup> David Kaiser, "Discussion, Not Negotiations," in *The Search for Peace in Vietnam*, 1964-1968, edited by Lloyd C. Gardener and Ted Gittinger, 52-53.

targets to strike from the Rolling Thunder 52 plan and those targets were very close to Hanoi.

One of the targets was the Van Dien truck depot. Its proximity to Hanoi prompted Harris to warn Momyer about the high potential for collateral damage. Momyer, Harris ordered, was to pick only the most experienced flyers for the mission, should it occur. Harris stressed the weather had to be good with an excellent visual acquisition of the target before dropping weapons that close to the city center. Thus far, mission commanders had aborted seven attempts to hit the target in November due to weather. As November turned December, the weather began to clear.<sup>96</sup>

On the first of December, Polish diplomat Janusz Lewandowski, the only communist diplomat in Saigon, informed Ambassador Bob Lodge that his contact in North Vietnam suggested Hanoi might be willing to talk.

Lewandowski's contact was Pham Van Dong, the Prime Minister of North Vietnam. Prime Minister of North Vietnam. Rusk the Secretary of State, later that same night. Rusk kept the information to a very select group. When the President heard of it from Walt Rostow, his Special Assistant for National Security Affairs, he requested confirmation from both Saigon and Warsaw. If the offering were true, the President was willing to talk.

On the morning of December 2nd, Momyer received the morning weather brief in Saigon. The weather was finally beginning to break. The alpha strike packages for the day were a 'go.' The mission commanders now had the call. As they arrived near Hanoi, the clouds lifted just enough for the strikes to occur. The targets were the Ha Gia petroleum storage facility, 14 miles to the north of Hanoi and the Van Dien truck depot, 5 miles to the south. Momyer's F-4s and F-105s attacked the POL storage facility while TF-77 aircraft bombed the truck depot. Hanoi immediately called the attack a blatant escalation of the

<sup>&</sup>lt;sup>96</sup> "Rolling Thunder: July 1965 – December 1966," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 15 July 1967, 98-99

<sup>&</sup>lt;sup>97</sup> James G. Hershberg, *Marigold: The Lost Chance for Peace in Vietnam* (Woodrow Wilson Center Press, Washington, D.C., 2012), 249.

<sup>&</sup>lt;sup>98</sup> Telegram From the Embassy in Vietnam to the Department of State, Document 322, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966, available from http://history.state.gov/historicaldocuments/frus1964-68v04/d322.
<sup>99</sup> James G. Hershberg, *Marigold: The Lost Chance for Peace in Vietnam* (Woodrow Wilson Center Press, Washington, D.C., 2012), 253.

war.<sup>100</sup> The newspaper headlines read, "Waves of Bombers Pound Oil Depot, Truck Park 5 Miles South of Hanoi." The Associated Press version of the story read, "Waves of U.S. bombers pounded an oil depot and truck park near Hanoi today in the closest raids to the North Vietnamese capital in five months."<sup>101</sup> Hearing of the raids, Lewandowski could not believe the American forces bombed so close to Hanoi with the prospect of an avenue for discussions. Later, senior members of the Johnson administration claimed there was no disconnect in military and political channels. The connections were there, but there was doubt on the authenticity of the peace initiative.<sup>102</sup>

The day had been the toughest yet for America in the skies of North Vietnam. Five Air Force and three Navy aircraft were downed. SAM's destroyed five of the eight aircraft. Momyer's losses included four F-4s and an F-105.<sup>103</sup> Although the day seemed to be a victory for Hanoi's Air Defense, the communist's official assessment found, "the enemy was able to destroy a number of targets, a number of our anti-aircraft artillery and missile positions were hit, and units deployed close-in did not fight as well as those deployed on the outer perimeter."<sup>104</sup>

Later that night, Lewandowski warned Lodge in Saigon about the bombings, "on the brink of such an undertaking, it is wise to avoid anything which would create the impression that the United States interprets anything in Hanoi as a sign of weakness . . . all attempts to interpret the DRV agreement for Warsaw contact as a result of bombing or an expression of weakness could lead to a tragic mistake." <sup>105</sup>

<sup>&</sup>lt;sup>100</sup> James G. Hershberg, *Marigold: The Lost Chance for Peace in Vietnam* (Woodrow Wilson Center Press, Washington, D.C., 2012), 254-256.

<sup>&</sup>lt;sup>101</sup> "Waves of Bombers Pound Oil Depot, Truck Park 5 Miles South of Hanoi," *Gettysburg Times*, December 2, 1966, 1.

<sup>&</sup>lt;sup>102</sup> James G. Hershberg, *Marigold: The Lost Chance for Peace in Vietnam* (Woodrow Wilson Center Press, Washington, D.C., 2012), 254-256.

<sup>&</sup>lt;sup>103</sup> Merle Pribbenow, "The 'Ology War: Technology and Idealogy in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003, 181.

<sup>&</sup>lt;sup>104</sup> Merle Pribbenow, "The 'Ology War: Technology and Idealogy in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003, 181.

<sup>&</sup>lt;sup>105</sup> James G. Hershberg, *Marigold: The Lost Chance for Peace in Vietnam* (Woodrow Wilson Center Press, Washington, D.C., 2012), 264.

On December 4, the weather over Hanoi once again allowed for attacks and once again, Momyer sent his forces north. The same two targets took the brunt of the American attack. <sup>106</sup> F-105s encountered sixteen MIG-17s directly over the POL storage facility. "As we climbed for the roll-in point," one F-105 pilot later recalled, "the horizon blossomed with orange bursts of flak and streaming SAM trails. The flak was heavier than I had seen before." Despite the flak, the pilots had to focus on finding their targets on the ground far below. "My dive-bomb pass was stable, but I couldn't spot the fuel storage area for all the flak coming up and gray smoke obscuring the target area. A constant stream of red fireballs flashed past my nose. I could see the flak sites, so I decided to bomb one. Just as I released my bombs, the sight filled up with MiGs, a formation of them." This was a typical day in the office for a Thud driver in the skies of Hanoi.

The same F-105 pilot remembered his mission debrief that day. "The intelligence officer told us that word had come in from Seventh Air Force that we were going back to JCS 19/51.10 'until we destroyed both targets, even if it killed us.' His somber tone was alarming." JCS 19 was the target designation for the Yen Vien rail yard and JCS 51.10 was the designation for the Ha Gia POL storage area. For the next eight days, both F-105 wings tried in vain to strike JCS 19/51.10.108

The optimum orchestration of the destruction of targets within the constraints of the political environment continued to elude Momyer. "If we lost too many aircraft on a target it was withdrawn," he later wrote, "and if we didn't hit the target in a given period of time, it was subject to withdrawal." These targets were the closest to Hanoi in months. POL, rail yards, and truck parks were all viable strategic interdiction targets. These were the kind of targets Momyer wanted, but the nature of the political constraints still made him wonder if these targets would be a part of an intense, continuing campaign or just another case of hitting targets only to be further restricted afterward. "I

<sup>&</sup>lt;sup>106</sup> James G. Hershberg, *Marigold: The Lost Chance for Peace in Vietnam* (Woodrow Wilson Center Press, Washington, D.C., 2012), 271.

<sup>&</sup>lt;sup>107</sup> Brig. Gen. Kenneth H. Bell, *100 Missions North: A Fighter Pilot's Story of the Vietnam War* (Brassey's, McLean, VA, 1993), 126.

<sup>&</sup>lt;sup>108</sup> Brig. Gen. Kenneth H. Bell, *100 Missions North: A Fighter Pilot's Story of the Vietnam War* (Brassey's, McLean, VA, 1993), 131.

tried to balance the attacks against these contradictions," Momyer recalled, "so that we didn't suffer losses that were too high and at the same time lose targets because they were not struck. This was not always possible and I considered losses more important than the withdrawal of targets." Momyer wanted to take care of his men and his force the best he could. It was, without a doubt, an incredible burden. His words, much like those he delivered at Korat, displayed defeat. They were written after he had two years to look back on the war and he likely felt an incredible sense of responsibility for the men who died executing the attacks against the North. But they also show the frustration of a leader who felt little control over the destiny of his men.

Momyer's feelings reveal an inability to come to grips with the idea that the exercise of political prerogative in war does not detract from war-making, but in fact, constitutes it. For a student of war, these words were acknowledged truisms. But for a leader who sent men to risk their lives in combat, it was difficult to reconcile the logic of the words with the frustrations it created.

The day after the raids on December 4th, Nicholas Katzenbach, the Under Secretary of State, but now acting in Rusk's absence, wrote a message to the U.S. Ambassador to Poland, John Granouski. The United States was willing to engage in direct discussions with Hanoi under the terms set out by the Polish diplomats. The terms were notably less extreme than Hanoi's standard four points. The terms were agreeable to US interests and noted a bombing halt was possible if it would facilitate a solution. The United States was, "ready to avoid any appearance that North Viet-Nam is forced to negotiate by bombings or that North Viet-Nam have negotiated in exchange for the cessation of bombing." This was to help Hanoi save face with their communist backers, a concern for their leaders. Any bombing halt, "would not involve recognition or confirmation by North Viet-Nam that its armed forces are or were infiltrating into South Viet-Nam." In order to ensure Hanoi was not seen to be reacting to the bombing, Katzenbach noted the de-escalation should occur in two phases with the first phase including the bombing suspension and the

<sup>109</sup> Momyer End of Tour Report, 1-2.

<sup>&</sup>lt;sup>110</sup> Telegram From the Department of State to the Embassy in Poland, Document 329, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966, available from http://history.state.gov/historicaldocuments/frus1964-68v04/d329.

second phase including all other agreed de-escalatory actions making NVN actions appear to be in relation to the second phase actions rather than the bombing cessation.<sup>111</sup>

In effect, Momyer's duty was to bomb the North Vietnamese to spur negotiations, but not in a way that the negotiations, should they occur, could be attributed to the bombing.

On December 7, Granouski relayed a meeting he had with Adam Rapacki, the Polish Foreign Minister. According to Granouski, Rapacki believed, "this new stage of bombing is either the work of those who are trying to complicate and undermine the peace effort or constitutes an effort to bring pressure on North Vietnam." Rapacki told Granouski Poland could not continue in an intermediary role until the bombing near Hanoi ended. Gronouski, who knew the targets had been approved for some time, asked if Rapacki thought it was merely the break in the weather giving the impression of increased bombing. Rapacki curtly replied, "Policy is more important than weather." In concluding the conversation, Rapacki told Granouski he was trying to create the conditions for peace and if the United States desired the same, they needed to avoid any impression of escalation to exert pressure on Hanoi. 112

Rapacki's warnings were not heeded. Back in Saigon, Momyer poured over the intelligence and studied the weather forecasts for the next break. There were still targets to hit in Hanoi. Momyer was intimately involved. As was his habit, "He personally looked at the intelligence, looked at the mission plan for the following day," remembered Momyer's chief of staff. Major General George Keegan, Momyer's chief of intelligence, believed Momyer viewed himself as a tactician. As Keegan recalled, Momyer made "decisions on how many sorties, which targets, load of effort, weight of effort, direction, tactics to

October 1980, 65, K239.0512-1236, IRIS No. 0110506, AFHRA.

<sup>&</sup>lt;sup>111</sup> Telegram From the Department of State to the Embassy in Poland, Document 331, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966, available from http://history.state.gov/historicaldocuments/frus1964-68v04/d331.

<sup>112</sup> Telegram From the Embassy in Poland to the Department of State, Document 332,

in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966, available from http://history.state.gov/historicaldocuments/frus1964-68v04/d332. 

113 General Louis T. Seith Oral History, by Lt Col Arthur W. McCants, Jr., 27-28

be used, considerations of air defenses, and the penetration problem."<sup>114</sup> Although Momyer was knowledgeable in these areas, he had experts on his staff that could work through these tactical challenges and present the solutions and recommended actions to Momyer. It is difficult to calculate the opportunity cost of lost time in the pursuit of other related strategic endeavors, but without a doubt, it existed.

On the 13th, the Air Force and Navy returned to Hanoi. This time, their two targets were the Van Dien vehicle depot and the first strikes on the Yen Vien railroad yard, six nautical miles northeast of Hanoi's city center. The skies over Hanoi swarmed with activity. American fliers reported the North Vietnamese had fired SAMs and flown MIGs in the same piece of sky. This showed new complexity in their air defense system. In the space of eighteen minutes, in an area just west of Hanoi there were 6 MIG-21s, 9 MIG-17s, 17 SAMs fired, four AAA reactions, 16 F-105s and 19 Navy aircraft. One F-105 was downed and SAMs damaged 3 Navy aircraft.

Back home in the United States, newspaper headlines read "US Bombs Hit Within Hanoi Limits." One article read, "U.S. warplanes bombed targets in the Hanoi area Tuesday and the Communists said the raids hit inside the city limits for the first time in the 22-month-old bombing campaign." Just as Harris had feared, the communists alleged civilian deaths from the raids. "The Soviet news agency Tass said bombs hit 'workers' districts situated along the Red River embankment' and that 'scores of buildings were destroyed in the fire that ensued . . . scores of ambulances are taking the wounded to hospitals and first aid centers."

On the 14th, Momyer sent his jets back to Hanoi. The raids started in the late afternoon and lasted nearly two hours. They were, by all counts, the

<sup>&</sup>lt;sup>114</sup> Keegan as quoted in Edgar F. Puryear, Jr., *George S. Brown, General, U.S. Air Force, Destined for Stars* (Presidio Press, Novato, California, 1983), 170.

<sup>&</sup>lt;sup>115</sup> Jacob Van Staavern, "USAF Plans and Operations, The Air Campaign Against North Vietnam, 1966," USAF Historical Division Liaison Office, January 1968, 60.

<sup>&</sup>lt;sup>116</sup> "WSEG Report, Air-to-Air Encounters in Southeast Asia, Volume II: F-105 Events Prior to March 1, 1967," Institute for Defense Analyses, Weapons Systems Evaluation Group, Arlington, VA, September 1968, 336-337.

<sup>117 &</sup>quot;U.S. Bombs Hit Within Hanoi Limits," The Morning Record, December 14, 1966, 1.

heaviest of the war.<sup>118</sup> The F-105s dropped 92 x 750-lb and 12 x 1,000-lb bombs on the Yen Vien railyards. There was a possibility not all of the bombs found their mark. Some potentially fell in a workers district near the Canal des Rapides, or Paul Doumer, bridge. All F-105 flights had visual verification of accurately delivered bombs except two. One F-105 flight stated they could not see where their bombs hit due to the combination of clouds and a MIG attack right after their release. Another flight was unable to verify the impact point of their bombs due to violent maneuvers to spoil the aiming solution of communist gunners after their bomb release.<sup>119</sup> Damage in the diplomatic district set off the most furor, although it was difficult to tell if the damage resulted from American bombs or the multitude of Vietnamese SAMs and AAA shells falling back to the earth.<sup>120</sup>

A MACV spokesman later released a statement, "A complete review of pilot reports and photographs show that all ordnance expended by American aircraft fell in the military target areas. None fell in the city of Hanoi." Hanoi, on the other hand, claimed bombs struck the center of the city and killed or wounded over 100 civilians. Chinese radio, the Soviet Tass news agency, and other communist media outlets condemned the actions of the United States. A speaker in Moscow's Supreme Soviet condemned the "barbaric bombing of Hanoi." It was not until a week later that Robert J. McCloskey, the State Department press officer stated, "We cannot rule out completely the possibility of an accident. If, in fact, any of our aircraft caused civilian damage, we regret it." 123

In Poland, Granouski met with Rapacki the evening of the last bombing. In a message intended for the President, Granouski detailed the conversation.

\_

<sup>&</sup>lt;sup>118</sup> James G. Hershberg, *Marigold: The Lost Chance for Peace in Vietnam* (Woodrow Wilson Center Press, Washington, D.C., 2012), 367.

<sup>&</sup>lt;sup>119</sup> "Rolling Thunder: July 1965 – December 1966," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 15 July 1967, 98-99

<sup>&</sup>lt;sup>120</sup> James G. Hershberg, *Marigold: The Lost Chance for Peace in Vietnam* (Woodrow Wilson Center Press, Washington, D.C., 2012), 367.

<sup>&</sup>lt;sup>121</sup> "US Command Denies Center of Hanoi Struck by Bombs," *Lodi News-Sentinel*, December 16, 1966, 1.

<sup>&</sup>lt;sup>122</sup> "Civilian Area in Hanoi is Not Hit," *The Bonham Daily Favorite*, December 16, 1966, 1.

<sup>&</sup>lt;sup>123</sup> "U.S. Eyewitness Confirms Bombing Damage Considerable Inside Hanoi," *Lewiston Morning Tribune*, December 26, 1966, 1.

Rapacki, visibly upset told Granouski, "Today I must state the following facts. First, that the U.S. had to be conscious of and realize the importance of establishing direct contact with Hanoi." Stressing what he believed was a real possibility for talks, Rapacki continued, "In this instance we received more than a signal; we received a direct, positive response from Hanoi about the possibility of talks in Warsaw." Rapacki detailed the "new and particularly brutal raid on the residential area in Hanoi," incredulous it occurred at exactly the moment the United States knew "that the matter of a Warsaw contact with Hanoi was actively being considered." Rapacki called the attacks, the "last drop that spilled over the cup." The Polish Foreign Minister concluded, "We understand therefore and fully share the wish of the Democratic Republic of North Vietnam, which was transmitted to us today, that we terminate all conversations begun months ago in Saigon." <sup>124</sup>

Granouski added his own suggestions in the message. "I am convinced," he wrote, "that if this represents the breakdown of the current peace initiative – and it surely does unless we take decisive and immediate action – then the Soviets, the Poles and the North Vietnamese will have no trouble convincing the leadership in every capital of the world that our stated desire for peace negotiations is insincere." Granouski believed there might be a chance to get the talks back on track, but it would have to include an assurance of no intention "to bomb in the immediate vicinity of Hanoi and Haiphong during this period." On December 16th, the Johnson administration directed U.S. forces to cease all attacks on the Yen Vien railroad yard. 126

On the 23rd, Sharp ordered his component commanders and subordinates to plan no further attacks within 10 nautical miles of the center of Hanoi. 127 The President told Wheeler the new restriction was due to certain sensitive negotiations, even mentioning the Italians and Poles were acting as

\_

<sup>&</sup>lt;sup>124</sup> Telegram From the Embassy in Poland to the Department of State, Document 342, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966, available from http://history.state.gov/historicaldocuments/frus1964-68v04/d342 
<sup>125</sup> Telegram From the Embassy in Poland to the Department of State, Document 342, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966, available from http://history.state.gov/historicaldocuments/frus1964-68v04/d342 
<sup>126</sup> Jacob Van Staavern, "USAF Plans and Operations, The Air Campaign Against North Vietnam, 1966," USAF Historical Division Liaison Office, January 1968, 61.

intermediaries. President Johnson still hoped there was a chance Marigold could be resuscitated. Wheeler was not to tell Sharp the reason for the new restriction, the President warned, because the peace negotiations required secrecy.<sup>128</sup>

Sharp, who imagined the new restrictions must be in reaction to the public outcry over civilian casualties, blasted a message to Wheeler. "We were just starting to put some real pressure on Hanoi," he wrote, "our air strikes on the rail yard and the vehicle depot were hitting the enemy where it was beginning to hurt." Sharp believed Hanoi hoped to get a favorable reaction out of the United States by complaining about civilian deaths. "And they did," he wrote, "more than they could have hoped for." Sharp's recommendation to Wheeler: "Let's roll up our sleeves and get on with this war. We have the power, I would like authority to use it." With the caveat he may not know all the considerations of importance to those in Washington, Sharp concluded, "It is my duty, however, to report to you my strong belief that we need to change some aspects of our current posture as the enemy must view it. This I have done." 129

While Sharp's opinions cheered service members, he was effectively beating his head against the wall. Momyer's perspective of the state of affairs in December reflected a more nuanced view of the situation. "As long as we fight within the current dimensions of [existing] policies," he told his fellow commanders, "we are going to have to look at results produced over a long period of time rather than any dramatic accomplishment that will come from the single employment of the force." Sadly, this nuanced view was held by an officer who had, despite numerous attempts, been granted no greater role in the strategic conceptions or operational control of the use of airpower in North Vietnam.

<sup>&</sup>lt;sup>128</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 36-21.

<sup>&</sup>lt;sup>129</sup> Message from Sharp to Wheeler, 242142Z, 24 December 1966, William C. Westmoreland Collection, Box 4 Folder 8, MHI.

<sup>&</sup>lt;sup>130</sup> Jacob Van Staavern, *Interdiction in Southern Laos* (Center for Air Force History, Washington, D.C., 1993), 195.

While the accusations flew for months after Marigold's death about both the authenticity and the blame, wherever the truth lie, the interaction between peace negotiations and the air campaign in the north illustrated the dysfunction and complexity of the dueling conceptions of Rolling Thunder. Predictably, the two preplanned truce periods over Christmas and New Years were not the only break in the action for Hanoi. It would be months before American forces would execute large bombing attacks near the capital city. The North Vietnamese official history attributed the pause to "poor weather, and in part to the restrictions of the American imperialist policy of escalation." To capitalize on the pause, the history read, "the Air Defense Service directed forces in both cities to vigorously prepare for combat." 131

Momyer's tests in his role in the north in the first six months of 1966 brought home the challenges of his job. His intimate involvement in all aspects of the operation may have failed to take advantage of the skill sets of his experienced staff, but it also put him in touch with those who commanded the wings, the leaders who took warriors into battle in the north. Momyer was hit hard with the futility of his efforts to bring unity and cohesion to the air effort and also by the price his men were paying in the pursuit of a disjointed air campaign. Through 1966, though, one thing rang true, Momyer would have to work even harder to take care of those who were fighting and to make the most of his limited control of the campaign in search of attaining the country's political objectives in Vietnam.

\_

<sup>&</sup>lt;sup>131</sup> Merle Pribbenow, "The 'Ology War: Technology and Idealogy in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003, 181.

## Chapter 12

## The Spokesman and Air Superiority

"The contest for air superiority is the most important contest of all, for no other operations can be sustained if this battle is lost. To win it, we must have the best equipment, the best tactics, the freedom to use them, and the best pilots." No two sentences authored by Momyer better capture his efforts in the quest for air superiority over North Vietnam in 1967. The previous year had not ended well. It would take hard work to turn the tide in the north. Momyer firmly believed, "superiority in equipment and superiority in tactics must be viewed as two elusive goals to be constantly pursued, not as assumed conditions." Momyer's constant pursuit of these 'two elusive goals' and his ability to explain effectively their importance made 1967 a year of rebound.

As 1966 drew to a close, intelligence sources estimated between 115 and 120 MIGs in North Vietnam. Of that total, North Vietnamese pilots operated 15 MIG-21s, their most capable fighter aircraft.<sup>2</sup> Many critics now and then failed to see the relevance in these numbers for the efforts in the south. As one author wrote, "The focus of the war presumably was to ensure the right of South Vietnam to endure as an independent government and the bombing of North Vietnam was part of that objective. Hence, attaining air superiority over the North would not affect the ongoing battle in the South, where North Vietnam had no aerial capability." Despite the misunderstandings of critics, the air efforts in the north were integral to the efforts in the south. During December of 1966, 17 engagements took place between the MIGs and US aircraft. In defensive reactions to MIG attacks prior to their targets, Momyer's aircraft jettisoned 91 tons of bombs. These were weapons that did not reach enemy targets, meaning Momyer's aircraft had to pay multiple visits to destroy targets and giving communist forces time to repair the bomb damage. When taken into consideration with the weather and the political restrictions, which

<sup>&</sup>lt;sup>1</sup> Airpower in Three Wars, 377.

<sup>&</sup>lt;sup>2</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 36-25.

<sup>&</sup>lt;sup>3</sup> Earl H. Tilford, *Crosswinds: The Air Force's Setup in Vietnam* (Texas A&M University Press, 2009), 85.

already hamstrung Momyer's operations, the MIG threat had implications for the overall effectiveness of the campaign.<sup>4</sup>

As Momyer waited for the weather to clear around Hanoi in December, a plan begin to form. Olds believed he could trick the MIGs into believing an entire force package of F-4s were F-105s through a number of clever deceptions. The ruse had been used before, but only for a single formation of F-4s. Olds dreamt big. If the MIGs took the bait and took off to intercept the F-105s, Olds and his men would be ready to attack in full force. "Sir," Olds told Momyer at a social gather at a commander's conference, "the MiGs are getting frisky up north and beginning to go after the Thuds. I have an idea on how to counter their threat and teach them a lesson." Momyer's response was a brief stare, and then a grunt, before he turned away. Although Momyer's sparse social skills often led others to believe he hadn't listened, he had. The grunt, in Momyer speak, meant, 'interesting, let me think about it and I'll get back to you.'

Momyer later related his thoughts in his book. "From our observations of fighter engagements in 1966, we determined that a properly designed fighter sweep might destroy a number of MIGs. Since airfields could not be struck during this period, a large air battle or series of battles was the only way to reduce the MIG force appreciably." Olds' timing was perfect. Momyer believed the North Vietnamese always flew the most aircraft after a stand-down. The time off would also allow the F-105s electronic attack pods to be delivered to and affixed on the F-4s. The traditional Christmas and New Year's truce period was just a few short weeks away.<sup>7</sup>

Although he did not refer to Olds' role in his book, Momyer had listened to him. In a week's time, Olds received a call from Momyer's executive officer. Momyer wanted to see Olds as soon as possible. Olds travelled to Saigon to meet Momyer. This time, after hearing Olds' idea, Momyer responded

<sup>&</sup>lt;sup>4</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 36-25.

<sup>&</sup>lt;sup>5</sup> John Darrell Sherwood, *Fast Movers: America's Jet Pilots and the Vietnam Experience* (The Free Press, New York, 1999),

<sup>&</sup>lt;sup>6</sup> Robin Olds, with Christina Olds and Ed Rasimus, *Fighter Pilot: The Memoirs of Legendary Ace Robin Olds* (St. Martin's Press, New York, 2010), 269-270.

<sup>&</sup>lt;sup>7</sup> Airpower in Three Wars, 133.

immediately. "Ok, go talk to [Brigadier General] Don Smith about some of our ideas about going after the MiGs and then I want to talk to both of you together." Smith was enthusiastic and pledged full support. After the conversation, Momyer gave Olds the go ahead.8

Momyer planned to give the order to execute Bolo on either the 26th of December or the 2nd of January. Both dates provided the ability to capitalize on the holiday stand-down period. Olds' plan included 28 F-105s from Takhli and Korat. These aircraft were to perform SAM and AAA suppression. 56 F-4s from Ubon in Thailand and Da Nang in South Vietnam provided the attacking force. There were to be two waves. Each wave would include aircraft ingress from the west and aircraft ingress from the east. In addition to masquerading as F-105s, the F-4 crews would fly their routes to feint an attack on the main jet airfield of the North Vietnamese. Scores of support aircraft such as tankers, EC-121s, and EB-66s brought the total cast of aircraft to over 100.9

On January 1st, Momyer passed the execute order for the package to arrive over the northeast quadrant of North Vietnam at 12 o'clock on January 2nd. As usual, on the day of execution, weather was a factor. The east force of F-4s initially turned around upon arriving in the target area thinking the mission was cancelled, and the west force had no activity until their second pass through the target. Olds, who led the entire package, was the first to encounter MIGs. The enemy scrambled a large portion of their MIG-21 force and they quickly broke through the low cloud cover. Upon seeing the F-4s, the enemy pilots reportedly exclaimed, "They are F-4s, F-4, not F-105s, where are the F-105s? You briefed us to expect F-105s. The sky is full of F-4s." Olds fired several missiles at the first MIG-21 to engage, but none hit. Olds' four ship of F-4s eventually claimed 3 MIG-21s, one was Olds' first aerial victory since World War II. The west force of the first wave eventually scored seven confirmed and two probable MIG-21s. Although the results had not been as

\_

<sup>&</sup>lt;sup>8</sup> Robin Olds, with Christina Olds and Ed Rasimus, *Fighter Pilot: The Memoirs of Legendary Ace Robin Olds* (St. Martin's Press, New York, 2010), 271.

<sup>&</sup>lt;sup>9</sup> Corona Harvest, "Operation Bolo: A Special Report," prepared by David F. Tippett, Major, USAF, for Air Command and Staff College, Class 1971, p. 5-7, K231.0371-30, IRIS #00917659, AFHRA.

strong as Momyer or Olds hoped, the North Vietnamese lost half of their MIG-21 force in approximately 13 minutes.<sup>10</sup>

On January 6th, Momyer pinned a silver star on the chest of Colonel Robin Olds. Thirteen other Airmen who participated in BOLO were awarded the Distinguished Flying Cross.<sup>11</sup> On that same day, Momyer's forces downed two more MIGs using a similarly deceptive tactic where two air-to-air missile carrying F-4s pretended to be a single reconnaissance configured F-4 by flying in close formation.<sup>12</sup>

On the 8th of January, the North Vietnamese Air Defense Command issued these orders, "MiG-21s will temporarily suspend combat operations to derive lessons learned, to study and refine Mig-21 combat tactics, and to conduct further training to improve technical and tactical skills." Momyer's support of the tactical innovations of his combat leaders bought the score of air superiority in the skies of North Vietnam more in favor of the American fliers and resulted in a stand down of the enemy's most capable fighter.

But there were signs Momyer wanted more. Throughout early January, articles appeared in the papers indicating there was talk of a broader campaign for air superiority in the north. Only a few days after BOLO, one of the articles stated, "High-level civilian officials are opposed for the time being to expanding the air war over North Vietnam to permit attack on North Vietnamese airfields." Despite contrary opinion, "the State Department view is that the United States maintains sufficient air supremacy over North Vietnam to make attacks on airfields unjustified at this point." By some measure, Momyer's recent successes were detractors for a broader campaign. Journalists cited civilian officials' belief that the current efforts were sufficient since nine MIG-21 fighters were downed in the last week. Besides, the article continued, the "point is also made that the rules of engagement have just been expanded . . . American

<sup>&</sup>lt;sup>10</sup> Corona Harvest, "Operation Bolo: A Special Report," prepared by David F. Tippett, Major, USAF, for Air Command and Staff College, Class 1971, p. 8-13, K231.0371-30, IRIS #00917659, AFHRA.

<sup>&</sup>lt;sup>11</sup> "Pilots Who Downed MIG's are Honored," New York Times, January 6, 1967.

<sup>&</sup>lt;sup>12</sup> Wayne Thompson, *To Hanoi and Back: The United States Air Force and North Vietnam*, 1966-1973 (Air Force History and Museums Program, United States Air Force, Washington, D.C., 2000), 55.

<sup>&</sup>lt;sup>13</sup> Merle Pribbenow, "The 'Ology War: Technology and Ideology in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003, 182.

military sources disclosed this week in Saigon that American pilots are now permitted to attack enemy jets as soon as their wheels leave the runway."<sup>14</sup>

Wheeler himself was quoted in the open press on the lack of a requirement for airfield attacks. "We've managed to deal rather effectively with MIG's I think," Wheeler's statement read, "There may come a time when we will have to do something more about that, but it isn't now." In a rare battle of competing philosophies in the open press, Momyer provided his viewpoint a few weeks later. "To really knock his air force out, you have to knock it out on the ground," Momyer opined. When asked if he was making a direct contradiction to national policy, Momyer stated, "I periodically make my recommendations, I feel I ought to say what I think about targets." Brigadier General William Dunham, Momyer's own director of operations, refuted the recent successes against the MIG-21s as a reason not to attack the airfields in plain speak, "They've still got 50 or 60 17s and 15s, and they're not pikers."

Momyer's forces soon used the new gains in air superiority to attack recently approved targets in the north. In the early months of 1967, Sharp successfully lobbied the JCS for more targets. His proposed targets included seven power plants and ten 'war supporting industry' complexes. A separate study by the CIA also argued for increased attacks against the 'war making potential' of North Vietnam. Rolling Thunder 53 and 54 included some of these target recommendations, but kept the mining of Haiphong off limits and preserved the sanctuary around Hanoi. A relaxation on the number of sorties that could be flown in a month accompanied the expanded target sets. The total sortie limit per month increased from 13,200 to 14,500. Momyer's men began hitting the expanded targets in the northeast quadrant of North Vietnam

<sup>&</sup>lt;sup>14</sup> Hedrick Smith, "U.S. Aides Oppose a Wider Air War," *New York Times*, January 8, 1967, p. 27.

<sup>&</sup>lt;sup>15</sup> Hedrick Smith, "U.S. Won't Strike at MIG Bases Now," *New York Times*, January 14, 1967, p. 1.

<sup>&</sup>lt;sup>16</sup> "Says North Viet Has Replaced Serious MIG Fighter Losses," *Kokomo Tribune*, January 22, 1967, p. 3.

 $<sup>^{\</sup>rm 17}$  R.W. Apple, Jr., "Hanoi is Expected to get New MIG's," New York Times, January 15, 1967, p. 10.

<sup>&</sup>lt;sup>18</sup> Pentagon Papers, Gravel Edition, Air War in the North: 1965-1968, Volume 2, 1-14. <sup>19</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 41-2.

again on the 13th of February. It had been nearly two months since the collapse of Marigold and the uproar over strikes against Hanoi. By March 10th and 11th, 22 F-4C and 78 F-105s attacked the Thai Nguyen iron and steel plant and associated thermal power facilities. Planners estimated 14 percent of the plant was destroyed by the hundreds of weapons dropped by the aircraft.<sup>20</sup> However, of the 51 times the plant had been scheduled for attack by the end of March, the weather only allowed four. <sup>21</sup> Even when they had the permission to attack new targets, Momyer's forces were thwarted by the effects of the northeast monsoon.

While Momyer found some solace in the expanded target sets, he continued to press for an air campaign within the confines of political restrictions rather than relying on the release of 'better targets' for success. Momyer called his latest campaign proposal Operation Cobra. Momyer envisioned Cobra as a unified interdiction plan, a combined campaign plan to interrelate the various out-country operations. Although Cobra did put the highest priority on the enemy heartland to exert maximum military and psychological pressure on North Vietnam, the plan did so through the interdiction of enemy lines of communication (LOCs). Momyer proposed a number of interdiction belts of targets to cut LOCs. By destroying these targets in the interdiction belts, Momyer aimed to hinder traffic and maintain pressure to stop or impede repairs of the LOCs. Once the traffic was obstructed, Momyer's forces could strike traffic as it backed up. Since the enemy would likely build air defenses to counter the American efforts, Momyer's plan also included aggressive SAM and AAA suppression.<sup>22</sup>

As an explanation of Cobra's focus on interdiction efforts south of the northern route packages, Momyer's chief of combat plans stated, "a timely effective program of interdiction against logistics movement in NVN cannot be conducted in Route Packages, V, VIA, and VIB . . . because (a) the mass of inter-connecting routes make bypass possible under almost any circumstances;

<sup>&</sup>lt;sup>20</sup> "The War in Vietnam: January – June 1967," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 29 April 1968, 99.

<sup>&</sup>lt;sup>21</sup> Pentagon Papers, Gravel Edition, Air War in the North: 1965-1968, Volume 2, 17. <sup>22</sup> "Interdiction in SEASIA, November 1966 – October 1968," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 30 June 1969, 42.

and (b) lack of clearance to close the port of Haiphong."<sup>23</sup> Momyer's staff briefed the plan to PACAF in early April. General Ryan reportedly liked the combined campaign plan idea but not the interdiction belts. Ryan wanted to keep the interdiction efforts focused on trucks and rolling stock instead of the lines of communications. Additionally, PACFLT objected to the proposal of Air Force operations in Navy route packages. Cobra was dead.<sup>24</sup>

Whether or not Cobra would have worked will never be known. It does, however, illustrate Momyer's continual pursuit of theater air campaigns against enemy systems. Momyer did not view airpower purely in its capability to destroy targets. Instead, he viewed airpower in a broader sense. He not only thought about the destruction of targets, but also the second and third order effects of that destruction. His plans accounted for those effects and used them to advantage. Perhaps, more importantly, the plans accepted the reality of political constraints (the restrictions against targeting Haiphong, for example) and adapted the campaign proposal accordingly.

Momyer wished to use the successes of his efforts in the arena of air superiority to both widen and focus the interdiction campaign. He could not target Haiphong, so he searched for the area that his forces could potentially create bottlenecks for the enemy supply routes. Knowing that airpower could have its best effects against concentrations of supplies, Momyer sought to find ways to create this condition. Once his air efforts created that condition, Momyer's plan accounted for the likely enemy reaction of building air defenses to defend the concentrations against attack. In shifting the interdiction campaign further south, Momyer could bring the efforts in RP1 into the holistic theater campaign. It also pulled the main line of air efforts away from the capital region and the restrictions which created difficulty and danger for Momyer's aviators. As efforts shifted south, the air campaign in the north could precipitously blend with the efforts in southern route packages, and particularly RP1 where NVA forces gathered for assaults into I Corps. These integrated efforts could further weaken the NVA advantage allowing

<sup>&</sup>lt;sup>23</sup> "Interdiction in SEASIA, November 1966 – October 1968," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 30 June 1969, 42.

<sup>&</sup>lt;sup>24</sup> "Interdiction in SEASIA, November 1966 – October 1968," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 30 June 1969, 42.

Westmoreland the ability to focus more of his efforts on the campaigns to provide security and stability for the people of South Vietnam. In essence, Momyer envisioned a theater campaign fought within the realities of the political environment. It didn't mean he agreed with or necessarily believed this was the 'optimum' use of airpower, but his plans made the best of the situation. An objection over Navy control of particular airspace and the focus of General Ryan, a man with a background in 'strategic' aviation, on individual trucks meant Momyer's comprehensive vision was not to be.

As Cobra died, Momyer made gains elsewhere. With the increased attacks in the north came intensified efforts from the enemy to defend against those attacks. Momyer had been asking for the authority to strike the airfields for some time, and the renewed enemy defensive efforts underlined those requests. Toward the end of March, Sharp asked for inclusion of Hoa Lac and Kep airfields in the target package for Rolling Thunder 55. The number of aerial engagements was steadily increasing with the increase in sorties in the north and on April 13, Sharp wrote to Wheeler to ask for authority to strike all of the airfields in North Vietnam. Sharp believed sustained attacks against the airfield could drive the MIGs out of North Vietnam. It was the argument Momyer had been making for months.<sup>25</sup>

The approval of the targets in Rolling Thunder 55 brought the authorization to strike Hoa Luc and Kep Airfields after April 24th. The goal of these attacks was not total destruction, but harassment and attrition of enemy aircraft on the ground. Wasting no time, Momyer's men attacked Hoa Luc on the 24th while naval aviators attacked Kep. Pack in the states, a newspaper headline read, "American warplanes struck today at Hanoi's railroad repair yards and its electricity transformer site only hours after they had bombed two MIG airfields near the North Vietnamese capital." The article explained the significance of the attacks, "The raids marked the end of what had been two

<sup>25</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 41-7.

<sup>&</sup>lt;sup>26</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 41-5.

<sup>&</sup>lt;sup>27</sup> "The War in Vietnam: January – June 1967," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 29 April 1968, 103.

privileged sanctuaries in the air war over North Vietnam . . . it was the first time in more than four months that American warplanes had bombed within 15 miles of the center of the capital."<sup>28</sup> Recalling this breakthrough years later, Momyer wrote, "The North Vietnamese were able to expand and develop new airfields without any counteraction on our part until April 1967 when we hit Hoa Loc in the western part of the country and followed with attacks against Kep."<sup>29</sup>

Momyer also made important gains in another area. In late April, the official history of the air defense of North Vietnam reported, "all missile battalions reported such heavy jamming that it was difficult for them to fire missiles. Many battalions experienced great confusion when trying to identify targets through the heavy interference."30 After the drastic F-105 losses the previous summer, Momyer directed the Takhli F-105s to conduct extended trials with the QRC-160-1 electronic jamming pod. First, the pod equipped F-105s flew in the lead of strike packages with two jamming pods per aircraft. In employing this tactic, Momyer's men found the SAM's focused on the F-105s without pods. In further trials back in the United States, Air Force tacticians found a single pod on each aircraft could mask F-105 flights if a 'pod formation' of no greater than 1500 feet between each aircraft in a four ship formation was flown.<sup>31</sup> The close formation brought a different kind of challenge to the F-105 pilots. Colonel Robert Scott, the wing commander at Takhli, recalled, "Once a SAM had been fired, a flight leader had to rely on his visual sighting of the missile to decide whether to retain the ECM protection by keeping his flight together or to break up the flight and take individual action." One can only imagine the bravery of the F-105 pilots as they watched a SAM screaming toward their formation, counting on the pods to defeat the guidance radar. As

<sup>&</sup>lt;sup>28</sup> Jonathan Randal, "U.S. Planes Raid Hanoi Rail Yard and 2 MIG Fields," New York Times, April 25, 1967, p. 1.

<sup>&</sup>lt;sup>29</sup> Airpower in Three Wars, 157.

<sup>&</sup>lt;sup>30</sup> Merle Pribbenow, "The 'Ology War: Technology and Ideology in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003, 180.

<sup>&</sup>lt;sup>31</sup> Peter Davies, *F-105 Wild Weasel Vs SA-2 'Guideline' SAM, Vietnam, 1965-1973* (Osprey Publishing, 2011), 23.

Scott remembered, "There usually wasn't a second chance, so his [the flight leader's] decision had to be right."<sup>32</sup>

By early 1967, Momyer required pods on all F-105s heading north.<sup>33</sup> In a self-congratulatory passage, Momyer later wrote the electronic jamming pods, "were soon recognized as the most important new development in enhancing the fighting potential of 7th Air Force."<sup>34</sup> The increasing survivability rates of the F-105s backed Momyer's self-proclamation.

With the protection the pods provided, Momyer and his aviators did not hesitate to take advantage of the open door on airfield attack. His men were so aggressive, in fact, McNamara became concerned the attacks were more than harassment and attrition. He was not the only one. Reflecting the difficulty of the complexity of the war, Wheeler was also concerned 'over aggressiveness' might mean Momyer and TF-77 would lose the authority to attack the airfields. Sharp issued a warning to Momyer to ensure his pilots followed the intent of the rules.<sup>35</sup>

As April ended, American forces claimed 11 air-to-air victories. Momyer's men accounted for nine of these aerial victories.<sup>36</sup> Momyer also lost nine aircraft to MIGs in the second half of April. These were his first losses to MIGs since December of 1966.<sup>37</sup> Trading American aircraft for enemy aircraft on a one to one basis was far from ideal. Sharp, with continued concern over the recent MIG activity and aircraft losses, asked to attack an additional two of the North Vietnamese jet-capable airfields. Wheeler did not support the request.

<sup>&</sup>lt;sup>32</sup> Airpower in Three Wars, 143.

<sup>&</sup>lt;sup>33</sup> Peter Davies, *F-105 Wild Weasel Vs SA-2 'Guideline' SAM, Vietnam, 1965-1973* (Osprey Publishing, 2011), 23.

<sup>&</sup>lt;sup>34</sup> Airpower in Three Wars, 142.

<sup>&</sup>lt;sup>35</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 41-7.

<sup>&</sup>lt;sup>36</sup> Merle Pribbenow, "The 'Ology War: Technology and Ideology in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003, 186.

<sup>&</sup>lt;sup>37</sup> "The War in Vietnam: January – June 1967," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 29 April 1968, 113.

Disappointed but undaunted, Momyer's men attacked Kep and Hoa Loc again on the 1st of May. They destroyed 16 MIGs on the ground.<sup>38</sup>

Despite their successes against MIGs on the ground, Momyer could not accept the losses against the MIGs in the air. As April turned to May, Momyer decided to arm a number of his F-4s in each strike package in an air-to-air configuration. These F-4s would carry only weapons for air-to-air combat and no bombs to attack ground targets. It was a change Momyer had resisted thus far since less aircraft with bombs naturally translated into less target destruction for each exposure to the lethal North Vietnamese air defense network. Almost paradoxically, the leaders of the North Vietnamese air force hoped to effect the same change through the constant MIG attacks. According to the official history, the communists hoped, "To force the enemy to strengthen his fighter escorts and reduce the number of aircraft carrying bombs." It was a hope they would soon regret.

Critics then and now place a great deal of blame for the U.S. losses in the air to the mismatch between American fighters and their Vietnamese foe. As the Director of Operational Requirements on the Air Staff in the early 1960s, Momyer oversaw a number of the decisions influencing the capabilities of the aircraft he now employed in combat. In a passage in his book, Momyer highlighted the differences between the fighters used by the North Vietnamese and those used by the Americans. "Because Soviet fighters from the MIG-15 through the MIG-21 were intended for relatively short missions in defense of the homeland," he wrote, "their designers kept them small and highly maneuverable." American "strategists, on the other hand, assumed that our fighters would have to go long distances and penetrate the defenses of an enemy." Due to the requirements to carry more gas and more ordnance over longer distances, wrote Momyer, designers "envisioned larger aircraft capable of great range and speed with some sacrifice in maneuverability . . . our tactical fighters were either designed or extensively modified to perform all three of the

<sup>&</sup>lt;sup>38</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 41-7.

<sup>&</sup>lt;sup>39</sup> Merle Pribbenow, "The 'Ology War: Technology and Ideology in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003, 186.

tactical air missions."<sup>40</sup> While MIGs operated over familiar territory, under excellent control, and even when shot down, could parachute safely into friendly hands, American fighters did not enjoy the same benefits. Momyer's air-to-air configured F-4s had a tough battle ahead.

On May 2, Sharp received authority to execute Rolling Thunder 56. It was the least restricted targeting package to date released to Momyer. There were ten targets in the northeast quadrant. There were some familiar names on the list. The Van Dien vehicle depot and the Yen Vien railyard, the two targets most involved in the demise of Marigold in 1966, were now permissible targets. An additional airfield, Kien An, brought the list of enemy airfields open to attack to three. Even though the list represented a significant expansion for the JCS, there were other targets requested but not released. The Hanoi thermal power plant, the port of Haiphong, and the airfield at Phuc Yen were among them.<sup>41</sup>

Despite the fact Phuc Yen was not on the list of released targets, Momyer drafted a concept for a potential future attack. In a letter to General Ryan, Momyer proposed a tactical deception plan along the same lines as Bolo. He wanted to route a strike package as if it were destined for one of the other major targets in the northeast quadrant. In the last minutes of their ingress, the strike package would divert toward Phuc Yen. In the same moment, another force would attack Hoa Lac. Through this plan, Momyer hoped to show the North Vietnamese "that no military airfield is safe from attack." Further justifying the ploy, Momyer wrote to Ryan, "The North Vietnamese will be required to flush their entire MIG force every time we strike, making the MIG's vulnerable to air attack, or risk imminent destruction of this force on the ground."<sup>42</sup>

Once again, Momyer's recommendations were not acted upon. While Phuc Yen was not authorized for attack during the month of May, Momyer's aircraft flew multiple sorties exposing them to attack from the field. On the 5th of May, American aircraft again dropped ordnance on the Yen Vien railroad

<sup>41</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 41-8.

<sup>&</sup>lt;sup>40</sup> Airpower in Three Wars, 156.

<sup>&</sup>lt;sup>42</sup> Message from 7AF TSN AB RVN to CINCPACAF, SUBJ: MIG Attrition and Harassment, 0414300Z May 1967, November 1970, IRIS No. 00874820, AFHRA.

yard. This time, the F-105s QRC-160-1 tactics practically blinded the North Vietnamese radars, as nearly every North Vietnamese SAM launched either self-destructed or crashed back to earth. While the Air Defense Command had previously blamed their own people for their recent lack of effectiveness against the strike packages, they now realized the QRC-160-1 pods were the problem.<sup>43</sup> Momyer's emphasis on electronic protection for the strike packages continued to pay off.

Momyer's combat leadership delivered more success in May, the month which brought the most MIG fights of the war thus far. During the month, American aircraft destroyed 27 enemy fighters. The fliers of the Seventh Air Force took credit for all but six of those aerial victories. Of the 21 victories credited to Momyer's men, the F-4 fliers claimed 15 victories.<sup>44</sup> The air-to-air configuration of the F-4s was paying off. On the 14th of May, another new aspect of F-4 employment resulted in aerial victories: the addition of the SUU-16/A gun pod with the General Electric M61A1 20-mm Vulcan Gatling gun.<sup>45</sup>

In early May, Lieutenant Colonel Frederick 'Boots' Blesse, the Director of Operations for the 366th Fighter Wing at Da Nang and well known throughout the Air Force for the fighter tactics manual he authored, *No Guts, No Glory*, flew to Saigon to get permission from Momyer to fly a pod mounted gun on the F-4 in combat. Olds, the 8th Tactical Fighter Wing Commander and another owner of F-4s who was present during the meeting, reportedly did not like the idea. "I wouldn't touch that thing with a ten foot pole," Olds' responded to Blesse's idea. Momyer's reaction was classic and true to character. "I think you have a hole in your head," he told Bleese, "but go ahead with your gun project and keep me informed."<sup>46</sup>

Momyer had told Blesse more than ten years earlier that the days of guns in fighter aircraft were long gone. As he had on many other occasions,

<sup>&</sup>lt;sup>43</sup> Merle Pribbenow, "The 'Ology War: Technology and Ideology in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003, 186.

<sup>&</sup>lt;sup>44</sup> Lou Drendel, . . . And Kill MIGS: Air to Air Combat in the Vietnam War (Squadron/Signal Publications, Inc., Warren, Michigan, 1974), 29.

<sup>&</sup>lt;sup>45</sup> Craig C. Hannah, *Striving for Air Superiority: The Tactical Air Command in Vietnam* (Texas A&M University Press, College Station, 2002), 62.

<sup>&</sup>lt;sup>46</sup> As quoted in Craig C. Hannah, *Striving for Air Superiority: The Tactical Air Command in Vietnam* (Texas A&M University Press, College Station, 2002), 62.

however, Momyer suppressed the strength of his own previous convictions to give the instincts of his combat leaders a chance to bear fruit. Besides, Momyer's earlier sense that missiles were the only required armament for a fighter aircraft was being proven wrong in the skies over North Vietnam. An average of eight radar guided AIM-7 missiles had to be fired for every aerial victory achieved, or a .125 probability of downing an enemy aircraft for each missile fired. The shorter range, heat seeking missile, the AIM-9, did not fare much better. During Momyer's time in Vietnam, an average of seven had to be fired for every aerial victory attained.<sup>47</sup>

On May 14th, two F-4s from the 366th scored the first aerial victories of the war with the pod mounted cannon. In fighter pilot colorful fashion, Blesse reported back to Momyer. "We engaged enemy aircraft in the Hanoi area, shooting down three without the loss of any F-4s," he wrote. "One was destroyed with missiles, an AIM-7 that missed and an AIM-9 heat-seeker that hit. That kill cost the U.S. government \$46,000." Of the two aircraft shot down with the cannon, 226 rounds in one case and 110 rounds in the other, Blesse wrote, "Those two kills cost the U.S. government, \$1,130 and \$550, respectively." Blesse concluded with a jab at his comrade in arms who believed the gun pods were not a good idea. "As a result of today's action," he wrote, "it is my personal opinion that there will be two pilot's meetings in the theater tonight – one in Hanoi and the other at the 8th TFW at Ubon."<sup>48</sup>

Many critics doubt the relevancy of aerial combat in the war effort. "Although air-to-air combat was only peripherally relevant to the objectives of Rolling Thunder," wrote one author, "U.S. pilots remained fascinated throughout the war with proving their worth in aerial encounters."<sup>49</sup> At best, such criticism is narrow-minded. At worst, it belies an underlying ignorance about the fundamental importance of air superiority. Momyer's deliberate manner of analyzing the best methods to gain air superiority was about much more than the glory of aerial victories. As May turned to June and the victories

\_

<sup>&</sup>lt;sup>47</sup> Peter E. Davies, *USAF F-4 Phantom II*, *MiG Killers 1965-68* (Osprey Publishing Limited, Osceola, Wisconsin, 2004),16, 19.

<sup>&</sup>lt;sup>48</sup> Craig C. Hannah, *Striving for Air Superiority: The Tactical Air Command in Vietnam* (Texas A&M University Press, College Station, 2002), 62.

<sup>&</sup>lt;sup>49</sup> Earl H. Tiliford, *Crosswinds: The Air Force's Setup in Vietnam* (Texas A&M University Press, 2009), 85.

continued, the Vietnamese Air Force official history noted a, "tremendous impact on morale." A number of North Vietnamese pilots "became fearful of engaging enemy fighters." Between March and June 1967, North Vietnam had lost "half of its fighter pilots, leaving insufficient pilots to staff even a single fighter regiment." The staggering losses caused the Chief of the Vietnamese General Staff to order the air force to focus their "efforts on preserving your forces to enable the Air Force to conduct combat operations over the long term." Air Defense Command ordered MiG-17s to fight "only small engagements when victory is certain." The MiG-21 pilots, on the other hand, were to focus their tactics away from the strike packages of F-105s and F-4s and towards the EB-66s, an easier target which, although important for electronic protection of the strikes, did not carry bombs to destroy targets in North Vietnam.<sup>50</sup>

In early June 1967, Hanoi's Central Committee came to a decision. With limited forces, they said, "we should not engage the enemy every single time he attacks Hanoi and our network of dikes . . . we must select the proper sector, the proper individual flight group, and the proper opportunity before launching our attacks." In many ways, this was a near total stand-down for the enemy's air force. The stand-down was a result of successful tactical changes and the ferocious fighting of Momyer's men. Fewer MIGs in the air meant more freedom of movement for the strike packages. It also meant more capability to focus on the defense against SAMs and AAA, but most importantly, fewer bombs jettisoned in defensive reactions to enemy fighters. Fewer bombs jettisoned meant more destruction of the targets released to Momyer's forces. Now, all Momyer needed was the freedom to strike them.

Momyer would have a chance to make the case for expanded efforts in the north to the man who was becoming the hardest to convince – Secretary of Defense Robert McNamara. In mid-June of 1967, Sharp wrote to Wheeler and Westmoreland about a briefing he planned to deliver to McNamara in Saigon in July. Sharp's intent was clear. His briefing was to cover, "Rolling Thunder

<sup>&</sup>lt;sup>50</sup> Merle Pribbenow, "The 'Ology War: Technology and Ideology in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003, 188-189.

<sup>&</sup>lt;sup>51</sup> Merle Pribbenow, "The 'Ology War: Technology and Ideology in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003, 189.

(since 1 Jan) and what we have achieved; current improved posture; and the required future course of action, emphasizing fact that we should not impose more constraints just when present air campaign is starting to show excellent results."<sup>52</sup> More importantly, Sharp planned to let his operational commanders tell a large part of the story. "Although I will give my views on the importance of our air campaign in the north," he wrote, "particularly in the northeast quadrant of NVN, the first-hand, direct knowledge of the commanders on the scene will be most helpful." Sharp hammered home the gravity of the meeting with his commanders. "The importance of our conviction for the necessity to continue the air campaign in the northeast cannot be over emphasized," he wrote.<sup>53</sup>

Sharp provided his subordinate commanders with an outline of the important concepts to emphasize during their briefings. "Prior to Jan 67," Sharp wrote, "the emphasis was on armed recce and interdiction with relatively little effort expended in RP six or JCS targets, and few lucrative JCS – controlled targets authorized." Sharp believed the acceptance of his recommendations for Rolling Thunder 54, the concept of balanced attacks against six target systems with the majority of the targets in northeast North Vietnam, and subsequent target packages had, "increased the pressure on Hanoi more than during the entire RT program prior to this period without any decrease in effort in the remainder of NVN and Laos." Sharp clearly wanted to convince McNamara to continue to loosen the reins on airpower in the north.

In addition to providing the brief outline, Sharp believed the meeting with McNamara was so critical, he flew to Saigon and staged a practice briefing with Momyer and Vice Admiral John J. Hyland, the commander of TF-77. Sharp, who scheduled the practice briefing to ensure his commanders' briefings were in line with his own talking points, later recounted, "It was a good thing I did, because they weren't on the same track." Sharp remembered, "Hyland's

<sup>&</sup>lt;sup>52</sup> Message from Sharp to Wheeler and Westmoreland, 170744Z, 17 June 1967, William C. Westmoreland Collection, Box 5, Folder 10, MHI.

<sup>&</sup>lt;sup>53</sup> Message from Sharp to Johnson and Ryan, 180028Z, 18 June 1967, William C. Westmoreland Collection, Box 5, Folder 10, MHI.

<sup>&</sup>lt;sup>54</sup> Message from Sharp to Ryan, Johnson, and Westmoreland, 192000Z, 19 June 1967, William C. Westmoreland Collection, Box 5, Folder 10, MHI.

presentation wasn't very good at all. Momyer's was much better," a circumstance Sharp found unsurprising as, "Momyer's an outstanding guy."55

The briefing to McNamara occurred in early July during his periodic visit to Vietnam. Sharp spoke first and his commanders followed. When it came time for Momyer to take the floor, he began by outlining the progress of operations in North Vietnam in detail. After providing these details, Momyer stated, "as a field commander directing the day to day air effort against North Vietnam in Route Package V and VIA, there is no question in my mind about the very profound effect we are having on the enemy's fighting ability."<sup>56</sup> Momyer summed up his brief by stating his belief was based on eight major factors. These factors were:

- 1) Seventh Air Force was able to sustain a level of effort not previously possible. Momyer based this on both the number of aircrews available and the improvements in weapons systems that permitted more effective operations.
- 2) The loss rate of American aircraft had decreased while the number of flights that Seventh Air Force was able to generate over enemy territory had increased. Momyer attributed this to tactics that the newer weapons permitted, which put the American aircraft in less danger from enemy fire. Fewer aircraft losses meant more effectiveness per sortie.
- 3) The enemy's surface-to-air missile firings had dropped significantly in the past year. Momyer believed that this indicated a strain in the enemy's logistic system (their ability to re-supply missiles) and thereby indicated success in the interdiction efforts.
- 4) The volume of anti-aircraft (AAA) fire from the enemy was fluctuating even though the American effort remained strong. Momyer believed that since AAA inflicted the most losses on American aircraft, any fluctuation in the amount of fire indicated both a stressed

<sup>&</sup>lt;sup>55</sup> "Reminiscences of Admiral U.S. Grant Sharp," Interviewed by Commander Etta Belle Kitchen, Volume II, 465.

<sup>&</sup>lt;sup>56</sup> Memo from W. W. Rostow to President Lyndon B. Johnson-General Momyer's Briefing re: 'Operations in Route Package VIA', July 18, 1967, Folder 27, Box 01, Veteran Members of the 109th Quartermaster Company (Air Delivery) Collection, The Vietnam Center and Archive, Texas Tech University.

logistical system (the enemy was conserving ammunition or simply did not have enough) and the psychological toll of daily bombing. In his opinion, this indicated that the United States should maintain pressure on the enemy—an argument against the frequent bombing pauses that took place for diplomatic reasons.

- 5) Seventh Air Force had no engagements with enemy aircraft in two months. Momyer claimed that this showed that the enemy's air force had been defeated and would suffer the same fate if it attempted to fly again. He attributed the defeat to the authority to attack the enemy's airfields. Because there were no enemy aircraft flying, U.S. pilots had to jettison fewer bombs before reaching their targets.<sup>57</sup> This meant more efficient air operations.
- 6) Seventh Air Force was successful at disrupting the operations of North Vietnam's northeast railroad line. Where North Vietnamese forces encountered breaks in the rail lines, they would have to transfer the cargo to trucks. This decreased the efficiency of the enemy's operations.
- 7) The enemy was taking a longer time to repair bridges and marshaling yards. Since these facilities were essential to the transportation of needed material, Momyer felt that this highlighted the stress on the enemy's system.
- 8) Lastly, the sheer number of boxcars destroyed during the month of June (1,000) put a significant strain on the enemy's supply system.<sup>58</sup>

Momyer's briefing deftly broke down the effects of the interdiction campaign. Momyer was an analytical and thoughtful professional, but it is evident that he paid extra care to deconstruct the operation into its component parts to put air operations in a light that permitted McNamara to perceive

<sup>&</sup>lt;sup>57</sup> When engaging with enemy aircraft, American aircraft often had to jettison their bombs in order to provide for better aircraft performance in combat with enemy aircraft. <sup>58</sup> Memo from W. W. Rostow to President Lyndon B. Johnson–General Momyer's Briefing re: 'Operations in Route Package VIA', July 18, 1967, Folder 27, Box 01, Veteran Members of the 109th Quartermaster Company (Air Delivery) Collection, The Vietnam Center and Archive, Texas Tech University.

progress. By doing this, he showed how he believed operations were impacting the enemy system. This approach undoubtedly struck a chord with McNamara, as it put the air war in Vietnam in the context of systems analysis. The degree to which Momyer's briefing hit home with McNamara was reflected in the Secretary's departing remarks at Tan Son Nhut. McNamara told the reporters he believed the strategy of bombing North Vietnam had accomplished both the objective of reducing the flow of infiltration and increasing the cost of the flow. "North Vietnam," McNamara said, "is paying a heavy price for continuing the infiltration." <sup>59</sup>

Momyer's briefing made a significant impression on all who witnessed it. Upon request, Wheeler provided President Johnson a transcript of Momyer's brief. Walt Rostow, President Lyndon Johnson's special assistant for national security affairs, affixed a note to the president on the transcript. The note said the briefing "helped convince a number of those in Secretary McNamara's party that we are making headway in the bombing of transport in the northern part of North Vietnam." The President was reportedly so impressed with the transcript that he read passages to his cabinet. In an interview with Kenneth Crawford of *Newsweek* shortly after the visit, President Johnson said McNamara was more impressed with Momyer than with anyone else he met on his trip. The optimism of the time was evident in Momyer's personal communication with the Chief of Staff of the Air Force, General Joseph McConnell. "In my judgment," Momyer wrote, "there are some very definite indications the North Vietnamese are really hurting for the first time." Momyer pledged to keep the pressure on the North Vietnamese. As evidence to his

<sup>&</sup>lt;sup>59</sup> William Tuohy, "McNamara Urges More Effective Use of Vietnam Troops," *Philadelphia Inquirer*, July 12, 1967, p. 1.

<sup>60</sup> Memo from W. W. Rostow to President Lyndon B. Johnson-General Momyer's Briefing re: 'Operations in Route Package VIA', July 18, 1967, Folder 27, Box 01, Veteran Members of the 109th Quartermaster Company (Air Delivery) Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>61</sup> Wayne Thompson, *To Hanoi and Back: The United States Air Force and North Vietnam*, 1966-1973 (Smithsonian, Institution Press, 2000), 76.

<sup>62</sup> Memo to President Lyndon B. Johnson from Tom Johnson: Meeting with Ken Crawford, July 20, 1967, Folder 09, Box 07, Larry Berman Collection (Presidential Archives Research), The Vietnam Center and Archive, Texas Tech University.

concern for his men who were fighting so hard, Momyer closed with optimistic words, "Morale has never been higher."63

During this period, President Johnson used General Andrew Goodpaster, the commandant of the National War College, as an intermediary with former president Eisenhower for military suggestions concerning the Vietnam War. The president's staff provided Goodpaster with the text of Momyer's briefing to obtain Eisenhower's thoughts on the progress of the air war. According to Goodpaster, Eisenhower was extremely interested in the briefing and was "especially interested in the mutually reinforcing effects" of the factors outlined. Eisenhower "recalled from his own experience the appearance of such mutually reinforcing effects in Europe when the tempo and systems coverage of the bombing campaign were brought to the proper level." 64

Shortly after McNamara arrived back in the states, President Johnson approved the Rolling Thunder 57 target package. It was to be the last numbered target package for Rolling Thunder. The list included 16 new targets near Hanoi and Haiphong. New targets brought some optimism, but the list once again did not include Momyer's recommendation of the airfield at Phuc Yen. The strikes against the new targets were not to appear 'escalatory.' This meant no more than three targets were to be hit in one day. Momyer was also ordered to distribute his armed reconnaissance sorties throughout RP6 as opposed to focusing those sorties in the newly released zone within 30 nautical miles of Hanoi but not closer than ten nautical miles.<sup>65</sup>

Momyer's ability to contextualize the air campaign made him an asset for the case for continued expansion. In early August, Wheeler wrote to Sharp and Westmoreland, "Senator Stennis is convening the Senate Preparedness Subcommittee on 9 August to investigate the effectiveness and the conduct of the air war against NVN." Admiral Sharp was a given for testimony in front of the committee, but Wheeler suggested "Spike Momyer would be our best

<sup>&</sup>lt;sup>63</sup> Letter from Momyer to McConnell, 22 July 1967, in author's possession.

<sup>&</sup>lt;sup>64</sup> W. W. Rostow to President Lyndon B. Johnson; Meeting with General Eisenhower, 10 August 1967, Folder 30, Box 01, Veteran Members of the 109th Quartermaster Company (Air Delivery) Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>65</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 44-2, 44-3.

candidate" if the President wished an additional witness to appear. <sup>66</sup> Just a week later, Wheeler wrote again. This time, he had been notified that he would also be testifying in addition to Sharp. "As I indicated in my earlier message," he wrote to Westmoreland, "I would like to have Spike Momyer appear with me, both in order to assist me and to afford the committee an opportunity to hear from an operational field commander." <sup>67</sup>

This was high praise for Momyer. Notably, Wheeler did not ask for anyone from the level of command immediately below Sharp. Both the commander of Pacific Air Forces and the commander of the Pacific Fleet were Sharp's immediate operational commanders for the air war in the north and would appear in an earlier subcommittee session with Sharp. Momyer, an acknowledged airpower expert and spokesman for the war, was to appear with the top uniformed officer in the United States.

As the date for the hearings drew near, Momyer stayed busy with the efforts in the north. In early August, his Airmen participated in the heaviest day of attacks against North Vietnam to date. On August 3rd, the fliers of Seventh Air Force and TF-77 combined for a total of 197 sorties in the northeast region.<sup>68</sup> Just a week later, the Hanoi Air Defense Commander watched a small unmanned photo-reconnaissance drone fly over Hanoi. Suspicious about what it could mean, he asked for the immediate recall of a number of his dispersed units. The North Vietnamese General Staff, convinced they still had time, denied the request.<sup>69</sup>

Back in the United States, the President had just authorized an addendum to Rolling Thunder 57. As explained in the Pentagon Papers, "the prospect of having his bombing policy submitted to the harsh scrutiny of the Stennis committee, taking testimony from such unhappy military men as

<sup>&</sup>lt;sup>66</sup> Message from Wheeler to Sharp and Westmoreland, 032204Z, 04 August 1967, William C. Westmoreland Collection, Box 6, Folder 1, MHI.

<sup>&</sup>lt;sup>67</sup> Message from Wheeler to Westmoreland, 102101Z, 10 August 1967, William C. Westmoreland Message File, COMUSMACV, 1 July -30 Sept 1967, CMH.

<sup>&</sup>lt;sup>68</sup> "U.S. Jets Strike in Record Raids in North Vietnam," *New York Times*, August 21, 1967, p. 1.

<sup>&</sup>lt;sup>69</sup> Merle Pribbenow, "The 'Ology War: Technology and Ideology in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003, 190-191.

Admiral Sharp, must have forced a recalculation on the President."<sup>70</sup> The new list included an additional sixteen fixed targets, six of which were within ten miles of Hanoi. The thermal power plant and the Paul Doumer Bridge were both on the expanded list.<sup>71</sup> In the late afternoon of the 11th, a large force of Momyer's F-105s successfully attacked the Paul Doumer Bridge for the first time. The bridge was the longest railway bridge in North Vietnam and critical for the northeast railroad system. The Hanoi Air Defense Command history read, "In addition to our incorrect assessment of enemy intentions and our failure to move forces back to Hanoi quickly enough, another reason for this failure was the inadequate technical skills of many missile and radar-controlled AAA units, which were unable to locate targets through heavy jamming." During the attack, North Vietnamese defenders could only launch three SAMs due to the jamming from the F-105's QRC-160-1 electronic protection pods.<sup>72</sup>

The skill of the aviators and the electronic protection of the pods resulted in the destruction of two of the Doumer Bridge's nineteen rail spans. Since trains could no longer transit the bridge, the North Vietnamese had to use alternate means to transport cargo across the Red River. After the attacks on the 11th, North Vietnamese leaders recalled three missile regiments and numerous AAA units to the area surrounding Hanoi. The recalls brought the total number of defense forces in Hanoi to 111 AAA batteries and 20 SA-2 missile battalions. On the 12th, Momyer's forces attacked again. This time the target was the Canal des Rapides Bridge, another key LOC target three miles northeast of the Doumer Bridge. Despite the increasing defenses in Hanoi, the

<sup>&</sup>lt;sup>70</sup> Pentagon Papers, Gravel Edition, Air War in the North: 1965-1968, Volume 2, 91.

<sup>&</sup>lt;sup>71</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 44-2, 44-3.

<sup>&</sup>lt;sup>72</sup> Merle Pribbenow, "The 'Ology War: Technology and Ideology in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003, 190-191.

<sup>&</sup>lt;sup>73</sup> Wayne Thompson, *To Hanoi and Back: The United States Air Force and North Vietnam* 1966-1973 (Air Force History and Museums Program, United States Air Force, Washington, D.C., 2000), 85.

SAM batteries scored no victories.<sup>74</sup> Momyer could not ask for a better send off to Washington, D.C.

Just a few days later, Momyer made the long trek back to Washington to appear before the Preparedness Investigating Subcommittee of the Senate Armed Services Committee with Wheeler. The two were among seven generals and three admirals to testify. The purpose of the hearing was to gain information on the conduct and effectiveness of the air war against North Vietnam. Senator Stennis was a well-known advocate of the JCS positions on the use of airpower in Vietnam, and as the hearings began Stennis assured Wheeler, "This is not an adversary proceeding . . . we are working together." Stennis provided the military commanders an opportunity to voice their concerns over the restrictions on the war effort. It was also an opportunity to convince the public the war was winnable with increased bombing. Stennis hoped the publicity from the hearings would push President Johnson toward the JCS position.<sup>75</sup>

To be certain, Wheeler set the stage with his prepared statement and did most of the talking during the question and answer session with the subcommittee members. There were, however, a number of questions directed Momyer's way. Although Momyer was a seasoned orator on airpower, it was apparent he had a rough time settling in during the hearings. When Wheeler first deferred a question to Momyer on whether or not an increased level of bombing in the north would decrease the casualties in the south, Momyer answered in relation to the number of forces allocated to the bombing in the north. "In my judgment," Momyer stated, "I do not think that we would get a significant reduction in the amount of men and material with an increase in the amount of forces we would put in." In the collegiality of the hearing, the subcommittee let the misstep pass.<sup>76</sup>

<sup>&</sup>lt;sup>74</sup> Merle Pribbenow, "The 'Ology War: Technology and Ideology in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003, 191.

<sup>&</sup>lt;sup>75</sup> Joseph A. Fry, *Debating Vietnam: Fulbright, Stennis, and their Senate Hearings* (Rowman and Littlefield Publishers, Lanham, Maryland, 2006), 103.

<sup>&</sup>lt;sup>76</sup> Lieutenant General Momyer, Commander, Seventh Air Force, testimony to US Senate. Air War Against North Vietnam: Hearings Before the Preparedness Investigating Subcommittee of Committee on Armed Services. 90th Cong., 1st sess., Part 2, August 16, 1967, 132.

Momyer's second opportunity to respond to the committee's questions also began with a stumble. Senator Strom Thurmond, who previously visited Momyer in Saigon for briefings, recalled being told that of the three elements of an interdiction campaign, two were being denied to Momyer. "I didn't mean to imply that they were being denied to me," Momyer replied, "I was discussing the three elements of an interdiction campaign, and the characteristic of the environment that we were in, and how that influenced the conduct of the interdiction campaign." Momyer elaborated further. "The interdiction campaign really begins in the heart of the enemy," Momyer explained, "where his supplies and equipment are more vulnerable." Momyer added, "By eliminating those supplies and equipment in their most vulnerable position, we begin a process of denying what residual can get to the battlefield." He continued describing the interdiction campaign elements. The second element required, "some kind of formalized ground campaign in which there is a line between the two opposing forces, in which you can launch an offensive that forces the enemy to consume logistics faster than he can get them down and replenish them." The final element, Momyer explained, "is the interdicting of the flow between the heartland and the enemy field forces."77

After describing the elements of an interdiction campaign, Momyer hit his stride. He next explained his earlier hesitation to accept the characterization that two of the elements of an interdiction campaign were being denied to him. First, he explained, "most of these war materials [are] coming from external sources." This meant "you have to disrupt and constantly disrupt, because they can be replenished, and there is no way under circumstances that you can constantly cut them out." Delineating between this war and others the nation had fought, Momyer stated, "It is not like it was in Germany [in WWII], when the war resources were being fabricated in country." For this reason, Momyer explained to the committee, "the targets regenerate all the time in North Vietnam."

<sup>&</sup>lt;sup>77</sup> Lieutenant General Momyer, Commander, Seventh Air Force, testimony to US Senate. Air War Against North Vietnam: Hearings Before the Preparedness Investigating Subcommittee of Committee on Armed Services. 90<sup>th</sup> Cong., 1<sup>st</sup> sess., Part 2, August 16, 1967, 143.

<sup>&</sup>lt;sup>78</sup> Lieutenant General Momyer, Commander, Seventh Air Force, testimony to US Senate. *Air War Against North Vietnam: Hearings Before the Preparedness Investigating* 

The second difficulty was, "the enemy, due to his elusiveness, sometimes will stand and fight, and sometimes he won't stand and fight; and, as a consequence, you can't put the strain on his logistics that you can in that formalized method." Further elaborating on this point, Momyer explained the conventional structure of two opposing forces was not present "in South Vietnam as you had in Italy, or in Europe, or even as you had in Korea." Given the limitations of the environment, Momyer felt that air interdiction was effective at what it could be expected to do.<sup>79</sup> Given these challenges to a classic interdiction campaign, Momyer told the committee, "We have been tremendously effective." He used this statement as a segue to address the impact of bombing restrictions. "If you cut out the interdiction that begins in the heart against the northeast, northwest, and then leave a blank bypass, all of those lines in North Vietnam, then you are permitting his forces to operate from sanctuary and to move more logistics."<sup>80</sup>

Momyer's next opportunity to make a significant contribution to the hearings came with the question, "Would striking the targets that are still off limits not reduce the number of causalities in the south?" It was essentially a rephrase of the first question Momyer was asked. He had an opportunity to redeem himself. He also had time to think about the answer, as Wheeler answered first. Momyer's answer was succinct and to the point, "I would say that any method that you can use to expand the current target systems will contribute to a reduction of casualties in the south."<sup>81</sup>

After a lengthy period of non-participation while Wheeler answered questions, Momyer had an opportunity for another input. The question: "Would

Subcommittee of Committee on Armed Services. 90<sup>th</sup> Cong., 1<sup>st</sup> sess., Part 2, August 16, 1967, 143.

<sup>&</sup>lt;sup>79</sup> Lieutenant General Momyer, Commander, Seventh Air Force, testimony to US Senate. Air War Against North Vietnam: Hearings Before the Preparedness Investigating Subcommittee of Committee on Armed Services. 90<sup>th</sup> Cong., 1<sup>st</sup> sess., Part 2, August 16, 1967, 143–144.

<sup>&</sup>lt;sup>80</sup> Lieutenant General Momyer, Commander, Seventh Air Force, testimony to US Senate. Air War Against North Vietnam: Hearings Before the Preparedness Investigating Subcommittee of Committee on Armed Services. 90th Cong., 1st sess., Part 2, August 16, 1967, 143-144.

<sup>&</sup>lt;sup>81</sup> Lieutenant General Momyer, Commander, Seventh Air Force, testimony to US Senate. Air War Against North Vietnam: Hearings Before the Preparedness Investigating Subcommittee of Committee on Armed Services. 90th Cong., 1st sess., Part 2, August 16, 1967, 153.

it not be militarily more effective to authorize the air commanders to proceed with the hitting or destruction of these targets instead of the present practice of periodically approving a package of diverse targets?" The question was clarified further. "Could you not do it better militarily if you were operating by exception rather than by specific approval?" Wheeler again answered first. He told the committee he didn't believe the targets were being approved in a piecemeal manner.<sup>82</sup>

Momyer was not in an easy position. The Chairman of the JCS had just stated the approval of targets in packages was acceptable. Momyer's response walked the fine line between support of his superior and the view of an operational commander. "No," he responded, "I do not think it really inhibits the ability to plan and execute a mission in the field by a system that they are currently using." This was the supportive comment. "I think the only question," he continued, "that really comes up is whether the targets that fit into the system are available to you at the appropriate time, so that you have continuity." Momyer told the committee he believed he could gain more effectiveness if he had "more freedom of operation on targets of opportunity." Momyer concluded his answer with, "but insofar as the lines of communication are concerned, these are pretty well fixed targets and you have to go back and forth though, because you knock them out and they fix those and you have to go back again . . . so it does not really hamper your operation there." The answer was a diplomatic way to support his superior and present his own viewpoints.83

When the committee later asked Momyer what he felt would make it easier for him to bring the war to a conclusion, he simply replied, "give me more flexibility for targets of opportunity, the reinforced target list that he [Wheeler] has mentioned that has been proposed; and to give me greater capability to

<sup>&</sup>lt;sup>82</sup> Lieutenant General Momyer, Commander, Seventh Air Force, testimony to US Senate. Air War Against North Vietnam: Hearings Before the Preparedness Investigating Subcommittee of Committee on Armed Services. 90th Cong., 1st sess., Part 2, August 16, 1967, 164.

<sup>&</sup>lt;sup>83</sup> Lieutenant General Momyer, Commander, Seventh Air Force, testimony to US Senate. Air War Against North Vietnam: Hearings Before the Preparedness Investigating Subcommittee of Committee on Armed Services. 90<sup>th</sup> Cong., 1<sup>st</sup> sess., Part 2, August 16, 1967, 164.

maximize against the lines of communications."84 Momyer's request was for the freedom to conduct an air campaign.

In follow-up questions, Momyer had the opportunity to comment upon air activities in the north over the past year. "A year ago when I first came out we were fighting for our very existence to try and get up into Route Packages to maintain enough effort to be able to be effective." Momyer laid out the reasons, "we found that these antiaircraft defenses were extremely heavy, the SAM's were extremely heavy, and at the same time we had to contend with the MIG's." In detailing the changes in the environment, Momyer laid out the impact of his efforts in air superiority.<sup>85</sup>

He first detailed the efforts against the MIGs. "We have driven the MIG's out of the sky for all practical purposes." He told the committee the MIGs were no longer a threat. "If he comes up he will probably suffer the same fate that he did before, so there is no interference on the bombing mission." Momyer's confidence in his defeat of the MIGs bordered on arrogance. He had every right to be proud of the successes of his men during the last few months, but if anyone knew United States was fighting against an adaptive enemy, it should have been Momyer. Earlier in the hearings, Senator Stuart Symington pressed Wheeler on why the airfield at Phuc Yen had not been added to the target list. Wheeler gave two overarching reasons – the field was close to Hanoi and it would be a difficult target to hit. Momyer had previously lobbied for authority to attack Phuc Yen.87 In support for Wheeler, he did not use Symington's

Q

<sup>&</sup>lt;sup>84</sup> Lieutenant General Momyer, Commander, Seventh Air Force, testimony to US Senate. *Air War Against North Vietnam: Hearings Before the Preparedness Investigating Subcommittee of Committee on Armed Services*. 90<sup>th</sup> Cong., 1<sup>st</sup> sess., Part 2, August 16, 1967, 164.

<sup>&</sup>lt;sup>85</sup> Lieutenant General Momyer, Commander, Seventh Air Force, testimony to US Senate. Air War Against North Vietnam: Hearings Before the Preparedness Investigating Subcommittee of Committee on Armed Services. 90<sup>th</sup> Cong., 1<sup>st</sup> sess., Part 2, August 16, 1967, 164.

<sup>&</sup>lt;sup>86</sup> Lieutenant General Momyer, Commander, Seventh Air Force, testimony to US Senate. Air War Against North Vietnam: Hearings Before the Preparedness Investigating Subcommittee of Committee on Armed Services. 90<sup>th</sup> Cong., 1<sup>st</sup> sess., Part 2, August 16, 1967, 168.

<sup>&</sup>lt;sup>87</sup> Lieutenant General Momyer, Commander, Seventh Air Force, testimony to US Senate. Air War Against North Vietnam: Hearings Before the Preparedness Investigating Subcommittee of Committee on Armed Services. 90th Cong., 1st sess., Part 2, August 16, 1967, 137.

previous line of questioning to make the case again. It was a choice he would soon regret.

Next, Momyer outlined the impacts of the improvements in electronic countermeasures. "We are now able to get up at the higher altitudes, and by getting up at higher altitudes, we have gotten out of the automatic weapons." In addition to improving survivability, the ability to enter the target area at higher altitudes allowed Momyer's pilots to acquire their targets earlier. As a result of these improvements, Momyer told the committee, "the loss rate has gone down, the number of sorties has gone up, and the bombing accuracy has gone up, and consequently we have been able to have more effect upon the interruption and the interdiction of the lines of communication." Momyer concluded, "I am optimistic that the application of our airpower is now beginning to take full effect and the gains will always be cumulative. It has taken time for these things to start showing, and I think the essence of this is now beginning to be felt."88

These passages illustrate Momyer's ability to characterize the second and third order effects of airpower. It was his ability to break airpower down into component parts and then illustrate how each of those parts not only contributed to the whole, but also to the conditions enabling the furtherance of the objectives in the north. However, there was also a lack of correlation to the American effort in South Vietnam or, for that matter, to the mechanisms that would cause the North Vietnamese to abandon their support of the communist efforts in the south. The absence of this information caused two problems. First, it allowed critics to isolate the efforts in the north from those in the south – a tendency Momyer often fought against. Second, it revealed the assumptions that hamstrung the conceptions of those leading the bombing efforts in the north. Those leaders seemed to assume more destruction of targets naturally led to an attainment of the political objectives for the war. Momyer did not make this case and there is no evidence it was heavy on his mind.

\_

<sup>&</sup>lt;sup>88</sup> Lieutenant General Momyer, Commander, Seventh Air Force, testimony to US Senate. Air War Against North Vietnam: Hearings Before the Preparedness Investigating Subcommittee of Committee on Armed Services. 90<sup>th</sup> Cong., 1<sup>st</sup> sess., Part 2, August 16, 1967, 169.

As the committee hearing drew to a close, Momyer endured a particularly forceful interrogation from Senator Symington. Although it was difficult to tell where it started, there was tension between the two during much of the discussion. In response to this tension, Wheeler, stealing a moment from a response to another question, stated, "Mr. Chairman, I think you should give credit to General Momyer for the development of the tactics and the techniques and the use of these equipments which have made a distinct change in my judgment in the favorable aspects of the air campaign. I think the committee should know that he deserves a great measure of credit."<sup>89</sup> Momyer's credibility with Wheeler spoke volumes about his status amongst the military leaders of the United States.

In a meeting with his advisors not long after Wheeler and Momyer testified, President Johnson reviewed the progress of the committee's hearings. It was his policies, after all, which were the intended target of the proceedings. McNamara lauded the testimony of both Wheeler and Momyer. He believed they had shown the committee there was relative harmony between the civilian policy makers and military leaders responsible for executing the war.<sup>90</sup>

Just a week after Momyer's testimony, the MIGs swung back into action in North Vietnam. They had nearly two months of rest and training. "Because our missile and AAA units were experiencing problems and in view of the urgent requirement to defend Hanoi," the North Vietnamese official history read, "Air Defense Command decided to make aggressive use of our Air Force fighters."

On August 23, 1967, two MIG-21s took off from Phuc Yen and flew low under Momyer's strike force as it travelled along Thud Ridge on the way into Hanoi. Previously, the MIGs had attacked from the front. This time, using tactics they practiced and trained to after the long period of absence, they evaded the American aircraft until reaching the rear of the strike package.

<sup>&</sup>lt;sup>89</sup> Lieutenant General Momyer, Commander, Seventh Air Force, testimony to US Senate. Air War Against North Vietnam: Hearings Before the Preparedness Investigating Subcommittee of Committee on Armed Services. 90th Cong., 1st sess., Part 2, August 16, 1967. 169.

<sup>&</sup>lt;sup>90</sup> Wayne Thompson, *To Hanoi and Back: The United States Air Force and North Vietnam*, 1966-1973 (Air Force History and Museums Program, United States Air Force, Washington, D.C., 2000), 81.

<sup>&</sup>lt;sup>91</sup> Merle Pribbenow, "The 'Ology War: Technology and Ideology in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003, 191.

Rolling out behind two F-4s, the MIG pilots fired their missiles and sent the two aircraft down in flames. Colonel Olds, who was leading a flight of air-to-air configured F-4s to protect the strike package, recalled, "I heard them scream. I turned, and all I saw were two burning objects." <sup>92</sup>

The day became known as 'Black Wednesday.' Not only did it mark the first MIG victories since May, but in addition to the two F-4s they claimed, Momyer also lost an F-4 to anti-aircraft fire, an F-4 to fuel starvation over Thailand, an F-4 in RP1, and an F-105 to ground fire in RP6. With the addition to the Navy's loss of one aircraft, the total loss for the day was seven aircraft, only one less than the worst day in the air for American pilots when eight jets were lost on December 2, 1966. <sup>93</sup>

Ironically, Sharp had again requested authority to strike Phuc Yen just before the MIG's victories. After hearing of the F-4 losses and with Sharp's request in hand, Wheeler was now in support and pushed the request to the Secretary of Defense. President Johnson had a meeting with Secretary McNamara, Secretary Rusk, Under Secretary Nitze, and General McConnell to discuss the costs and benefits of attacking Phuc Yen. General Harold Johnson, the Army Chief of Staff, was also in attendance. McConnell, undoubtedly operating from talking points gained from conversations with Momyer, made his case. "There are three types of defensive problems we encounter," he told the President, "1. MIGs 2. Antiaircraft guns 3. SAMs." Pilots over North Vietnam were currently concerned with all three. "If we can eliminate one (MIGs)," McConnell relayed, "we can perform more effectively." McConnell concluded with plain speak, "It hurts to see those planes on the runways and not be able to strike them, yet they appear shortly afterwards firing at our planes."

<sup>&</sup>lt;sup>92</sup> As quoted in Wayne Thompson, *To Hanoi and Back: The United States Air Force and North Vietnam*, 1966-1973 (Air Force History and Museums Program, United States Air Force, Washington, D.C., 2000), 86.

<sup>&</sup>lt;sup>93</sup> Wayne Thompson, *To Hanoi and Back: The United States Air Force and North Vietnam*, 1966-1973 (Air Force History and Museums Program, United States Air Force, Washington, D.C., 2000), 86.

<sup>&</sup>lt;sup>94</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 44-9.

McConnell told the President he estimated three to five aircraft losses in the initial raid against Phuc Yen.<sup>95</sup>

McNamara stood on the other side of the argument. "We have 85–23 ratio of enemy loss to friendly loss in air," he pointed out to the President, "we have a better ratio in air on kills than we would have on this one." Sensing the path of the discussion, McConnell resorted to the 'wisdom of the military leaders' avenue of attack and stated all of the President's military advisors were for the attack. McNamara acknowledging this point, stated, "For them, it is SOP (Standard Operating Procedure) to attack the bases from which the planes originate. The pilots feel strongly on the issue too. I feel they are wrong." Rusk and Nitze also sided with McNamara. They believed combat air patrols or air-to-air combat would be more efficient methods of dealing with the MIGs. They also felt if Phuc Yen were closed, the North Vietnamese would be forced to move their aircraft to China. Although McConnell felt this would be a positive impact, since the MIGs would have less fuel to operate over Hanoi, Rusk and Nietze believed MIGs operating from China would be viewed as Chinese intervention, a potential escalation to the war.<sup>96</sup>

The President, miscounting or misunderstanding the opinions of his advisors, told the gathering, "Well, that's two for and two against." He then summarized the arguments. There was a possibility of losing 11 planes for the 11 destroyed on the ground, there could be a number of civilian casualties, the airfield would have to be hit often to keep it closed, there were potential political implications with China, and the threat could potentially be handled by combat air patrols or air-to-air combat. Although he was himself inclined to hit the airfield, he told his advisors, "For those reasons, I am not going to authorize it today." Leaving the door open, however, the President told McNamara, "you go back with General Johnson and General McConnell and notify the field

<sup>95</sup> Notes from Meeting, Washington, August 24, 1967, 5:33–6:25 p.m, Document 294, in Foreign Relations of the United States, 1964-1968 Volume V, Vietnam, 1967, available from http://history.state.gov/historicaldocuments/frus1964-68v05/d294.

<sup>&</sup>lt;sup>96</sup> Notes from Meeting, Washington, August 24, 1967, 5:33–6:25 p.m, Document 294, in Foreign Relations of the United States, 1964-1968 Volume V, Vietnam, 1967, available from http://history.state.gov/historicaldocuments/frus1964-68v05/d294.

commanders that this MIG base is under 'serious consideration.' But tell the men that it may honestly cause us serious political problems."97

Not surprisingly, Momyer's previous congressional testimony resurfaced during McNamara's appearance in front of the Stennis committee just a day after the President's meeting with his advisors. When Senator Howard Cannon pressed McNamara on the exclusion of Phuc Yen from the approved target list, he responded, "I might draw your attention to a statement I came across last night in reading General Momyer's testimony." McNamara proceeded to read Momyer's quote about driving the MIGs out of the sky directly from the transcript. While Cannon attempted to make an issue out of Phuc Yen, McNamara used Momyer's testimony to minimize its importance. "I think it is a marginal decision," McNamara told the committee, "but I want you to understand why it is marginal when the commander of the Air Force involved says we have driven the MIG's out of the sky, they are no longer a threat." In closing his case for leaving Phuc Yen off of the approved target list, McNamara asked, "What would you do if you were charged with the responsibility of deciding whether to risk American lives to strike an airbase that had 11 airplanes on it that couldn't be destroyed by one strike?"98

In further illustration of the complexity of the problems Momyer faced in the north, not only was Phuc Yen held off of the approved target list, but in late August the President also suspended authority to bomb within the 10 nautical mile prohibited zone surrounding Hanoi. The suspension, meant to open doors for peace talks with Hanoi, was particularly hindering during the short period of good weather over the North Vietnamese capital.<sup>99</sup> Momyer, when asked about the impact of these restrictions and often at peace with his fate as the

<sup>&</sup>lt;sup>97</sup> Notes from Meeting, Washington, August 24, 1967, 5:33–6:25 p.m, Document 294, in Foreign Relations of the United States, 1964-1968 Volume V, Vietnam, 1967, available from http://history.state.gov/historicaldocuments/frus1964-68v05/d294.
<sup>98</sup> Secretary of Defense Robert McNamara, testimony to US Senate. Air War Against North Vietnam: Hearings Before the Preparedness Investigating Subcommittee of Committee on Armed Services. 90th Cong., 1st sess., Part 4, August 25, 1967, 306.
<sup>99</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 44-11.

operational Air Force commander, told a reporter, "I look at my job here as taking what is given to me and doing the best I can with it." <sup>100</sup>

The North Vietnamese used the nearly two month respite from American attacks in the areas surrounding Hanoi to train for the next return of Momyer's pilots. Earlier in 1967, the Air Defense units developed a complicated system to track American aircraft within the jamming pattern created by their electronic attack pods. The SAM units scored a small number of successes, but the two month respite provided more time to perfect their craft. In mid-October, the air defense units held a conference in Hanoi to discuss and further perfect their new SAM employment method. If the Americans came back to Hanoi, the conference decided, the defenders of the capital region would concentrate the fire and radar energy of as many missile battalions as possible to inflict massive damage on the American striking force. 101

While the SAM defenses trained, the MIGs continued to find successes against the American aviators. Through all of September, North Vietnamese air operations forced the jettison of over 107 tons of bombs from American aircraft. By comparison, 91 tons were jettisoned in December of 1966. In an eleven day period in early October, 32 MIG sorties successfully accounted for the downing of three American aircraft. During the same time period, Momyer's men scored no aerial victories.<sup>102</sup>

On October 23, dismayed with the progress of peace talks and aware of the impact the airspace restrictions were having on his forces, President Johnson once again authorized strikes within the Hanoi prohibited area. <sup>103</sup> In addition to the new authorizations within the ten nautical mile ring, Johnson also authorized attacks against the airfield at Phuc Yen. With a hint of things to come from the increase in surveillance flights over Hanoi, North Vietnamese

<sup>&</sup>lt;sup>100</sup> George McArthur, "Air Strike Policies Can Be Frustrating," *The Register: Danville, Virginia*, October 8, 1967, p. 9-A.

<sup>&</sup>lt;sup>101</sup> Merle Pribbenow, "The 'Ology War: Technology and Ideology in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003, 193.

<sup>&</sup>lt;sup>102</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 44-10.

<sup>&</sup>lt;sup>103</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 44-11.

air defense units pulled all the air defense assets they could back into the capital zone. The numbers were staggering. There were more than a thousand AAA guns and over 150 SAM launchers standing at the ready. To pursue their new strategy of massing their missile forces, the North Vietnamese placed over 80 percent of their missile force in the area surrounding Hanoi. 104

On October 24, Momyer gave the 'go' order for his wing commanders to attack Phuc Yen. Thuds from Takhli, Thuds from Korat, and Phantoms from Ubon were all involved in the strike and coordinated attacks with Navy aircraft. As Momyer's forces sped toward Phuc Yen and began their attacks, the missile branch of the North Vietnamese air defense force let loose with more SAMs than had been fired on any other single day during the previous three years of Operation Rolling Thunder. Although McNamara and McConnell assumed the attacking forces would take significant losses, not one of Momyer's aircraft was lost in the raid. Photos of Phuc Yen taken after the strike showed the North Vietnamese likely lost nine aircraft and the use of the airfield. In addition to four MIG-21s destroyed on the ground, F-4 pilot Major William Kirk and his backseater, First Lieutenant Theodore Bongartz, engaged and destroyed a MIG-21 as it attempted to ambush the strike package from the rear quarter. After firing two radar guided missiles, Kirk downed the MIG-21 with the gun pod mounted on his F-4.

Over the next few days, Momyer's forces took advantage of favorable weather conditions to continue their attacks near Hanoi and against the airfield at Phuc Yen. Against massive firings of SAMs, Momyer's men attacked and once again dropped spans of the Doumer Bridge. Over a four day period,

\_

<sup>&</sup>lt;sup>104</sup> Merle Pribbenow, "The 'Ology War: Technology and Ideology in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003, 193.

<sup>&</sup>lt;sup>105</sup> Walter Hanek, ed., *Aces and Aerial Victories* (Office of Air Force History, Washington, D.C., 1976), 67-68.

<sup>&</sup>lt;sup>106</sup> Merle Pribbenow, "The 'Ology War: Technology and Ideology in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003, 193.

 $<sup>^{107}</sup>$  Walter Hanek, ed., *Aces and Aerial Victories* (Office of Air Force History, Washington, D.C., 1976), 68.

Momyer lost two aircraft to SAMs while the Navy lost five. <sup>108</sup> In addition to the MIG-21 downed on the 24th and those destroyed on the ground at Phuc Yen, Momyer's men downed four more MIGs in engagements near the capital. <sup>109</sup> The North Vietnamese historians, assessing their own performance, wrote, "We did not attain a high level of success in fulfilling our mission, progress was not uniform, and we did not fully exploit the capabilities of the different branches and units to destroy more enemy aircraft and protect the targets more effectively." Further, the history read, "We allowed the enemy to knock out the Paul Doumer Bridge during his first attack, Noi Bai [Phuc Yen] Airfield suffered heavy damage, and a number of our aircraft were destroyed or damaged." <sup>110</sup>

According to the official history of the Joint Chiefs of Staff, "In terms of high-value targets struck, the last part of October and the first half of November marked the most productive in ROLING THUNDER history."111 Despite the successes of late 1967, however, the bombing did not bring the conflict to an end. A meaningful peace negotiation had yet to bear fruit and by all appearances, the air efforts had no noticeable effect on communist activities in the south despite Momyer's assumption that they would. The Institute of Defense Analysis' JASON Summer Study Group, the same independent scientific advisory group who studied the air campaign against the north in 1966, once again analyzed the impact of air operations in the north. "As of October 1967," the study read, "the U.S. bombing of North Vietnam has had no measurable effect on Hanoi's ability to mount and support military operations in the South." The study also addressed those who believed the bombing campaign could destroy the will of the North Vietnamese, if not their ability, to militarily support the insurgency. "The bombing campaign against NVN," the study read, "has not discernibly weakened the determination of the North

<sup>&</sup>lt;sup>108</sup> Merle Pribbenow, "The 'Ology War: Technology and Ideology in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003, 193.

<sup>&</sup>lt;sup>109</sup> Lou Drendel, . . . *And Kill MIGS: Air to Air Combat in the Vietnam War* (Squadron/Signal Publications, Inc., Warren, Michigan, 1974), 29.

<sup>&</sup>lt;sup>110</sup> Merle Pribbenow, "The 'Ology War: Technology and Ideology in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003, 193.

<sup>&</sup>lt;sup>111</sup> "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970, 44-13.

Vietnamese leaders to continue to direct and support the insurgency in the South." Whether it was sympathetic to Momyer's plight or indicative of the difficulty of applying air power in North Vietnam, the study concluded, "We are unable to devise a bombing campaign in the North to reduce the flow of infiltrating personnel into SVN."

McNamara, who in the past had found common ground with some of the ideas found in the JASON reports, advocated a bombing halt in a November report to the President. "This halt seems advisable," he wrote, "if not mandatory, entirely apart from its actual effect in bringing about negotiations and a settlement of the Vietnamese conflict." McNamara not only believed the bombing halt was the only logical path to peace talks, but he also believed it would lead to, "suspension of overt enemy operations across the DMZ." In conclusion, he wrote to the President, "No other course affords any hope of these results in the next 15 months." 113

The President did not accept McNamara's recommendation, but he did accept his request for resignation later that same month. For Momyer, the Secretary's request marked a significant point in the conflict. Although his men fought hard in the skies over North Vietnam, Momyer often felt he and his chain of command fought McNamara to provide the environment for success for his men. What Momyer did not know, however, was that McNamara's resignation announcement and the subsequent end of the good flying weather over North Vietnam would mark the last successful dry season of air operations over the north for years to come.

Momyer's combat leadership provided the environment for the men who fought in the skies over North Vietnam through the most successful year of the campaign in the north. Since the beginning of 1967, Momyer had listened to his war fighting leaders and guided their ideas into the foundations of programs that took Seventh Air Force from the lows of 1966 to the achievements of 1967. Deceptive tactics, new electronic attack formations, dedicated air-to-air

Pentagon Papers, Gravel Edition, Air War in the North: 1965-1968, Volume 2, 124.Draft Memorandum From Secretary of Defense McNamara to President Johnson,

Washington, November 1, 1967, Document 375, in Foreign Relations of the United States, 1964-1968 Volume V, Vietnam, 1967, available from

http://history.state.gov/historicaldocuments/frus1964-68v05/d375.

configured escorts, and gun pods for fighter aircraft all led to advances in the skies.

But it was more than providing the environment for his warfighters to succeed. Momyer's ability to explain the accomplishments of the campaign in a way that his seniors understood made him an invaluable member of the military leadership team for the war. Momyer was the 'go to' commander for making the case for airpower in the challenging political landscape surrounding the air efforts in Vietnam, especially North Vietnam. He was also the one who brought the efforts in the north together with the political objectives in the south. "We must seek with our bombing to make it as difficult as possible for him [the North Vietnamese] to support his forces in the South," he told a reporter, "to disrupt his supply lines to the maximum extent and to destroy targets of military value." For Momyer, the fight for air superiority in the skies over North Vietnam was the means to the end of creating a favorable military environment for American forces in the south. Momyer grasped the true theater aspect of the campaign in a way most others did not.

<sup>114 &</sup>quot;Air General Cites Need for Land War," New York Times, September 20, 1967.

## Chapter 13

## The Quest for Single Management

The Tet Offensive marked the war in Vietnam in 1968. When Momyer first heard the rocket attacks and small arms fire on that early morning at the end of January, he was in the midst of two other significant battles. The first was the effort to support the Marines at Khe Sanh. The second was the battle for centralized control of airpower in South Vietnam. Both battles provided the ultimate test for Momyer as a senior officer, a leader of combat airpower, a bureaucratic actor, an airpower thinker, and a combat Airman. Through it all, Momyer displayed a sense of tenacity, steadfastness, flexibility, and vision.

The question of centralized control of airpower was not new in 1968. Although the arrangements with Marine aviation had troubled Momyer since his arrival in theater, the summer and fall of 1967 brought the relationship to a boil. In May of 1967, Marines operating near the DMZ made contact with a large NVA force south of the DMZ. After a brief fight, the enemy force retreated to their sanctuaries north of the DMZ. Shortly thereafter, the 3d Marine Division launched Operation Hickory, a multipronged assault into the DMZ. For this operation, the Marines requested ground commander control of air and artillery in the airspace that contained the Tally Ho area and the DMZ areas reachable by friendly artillery, approximately twenty miles away from Marine artillery bases. Although Momyer disagreed with the initiative, a subsequent message from the 1st MAW asserted it would control all air support within the operations area defined in the earlier message, including the Tally Ho area in North Vietnam.<sup>1</sup> To this the Seventh Air Force "came down with both feet on the fact that they wanted that back to the line of the Ben Hai river." Momyer told Major General Robertshaw, the commander of the 1st MAW, "the Air Force planes would not, under any circumstances, check in with the Marine DASC if they were operating down in this area; they would be controlled out of their own DASC."<sup>2</sup> Before the operation began, MACV designated the Forward Bomb Line (FBL) as the delineation between Marine and Air Force control of the airspace

<sup>&</sup>lt;sup>1</sup> "Operation Hickory," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 24 July 1967.

<sup>&</sup>lt;sup>2</sup> Oral History Transcript, Lieutenant General John A. Chaisson, U.S. Marine Corps (Retired), History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C., 1975, MCHI, Quantico, 64-65.

above the battlefield. For Hickory, the FBL was the northern edge of the DMZ.<sup>3</sup> Momyer was under the impression the line would move back to the Ben Hai river, running through the middle of the DMZ, after the operation, but it did not.<sup>4</sup>

As the summer drew on, Marine Corps firebases in the northern portions of I Corps were taking as many as 1,000 rounds of artillery per day. Lieutenant General Robert E. Cushman, Jr., the commander of the III Marine Amphibious Force, requested Momyer direct a minimum of 75 sorties per day in the areas north of the DMZ to help minimize the artillery threat, while the 1st MAW assets would prosecute the attack throughout the DMZ, making it his priority for air support. Momyer, unhappy with the geographic depth of Cushman's control, wrote to Westmoreland and asked him to move the FBL back to the southern edge of the DMZ. Momyer felt the line should be kept as close to friendly forces as possible to permit the maximum effect of the airpower under his control. In a counter point, Cushman informed Westmoreland he could coordinate with Momyer's forces wherever required and asked to move the FBL even further to the north. Westmoreland denied both proposals.<sup>5</sup>

Of the initial Air Force efforts at Con Thien, Marine General John Chaisson later recalled, "There was no doubt in my mind, sitting there as neutral as I'm able to get, that during the early part of the Con Thien battle in September that the Seventh Air Force was not putting the weight of effort into the area immediately north of Con Thien that they should have been putting in there." The Marines perceived Momyer was balking in his support to protest the assertions of Marine control. Momyer believed the Marines' assertion of control kept him from applying airpower to its best effect. As with most disagreements between the two services, the truth lay somewhere in the middle.<sup>6</sup>

<sup>&</sup>lt;sup>3</sup> "Operation Hickory," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 24 July 1967.

<sup>&</sup>lt;sup>4</sup> "Air War in the DMZ, September 1967 – June 1968," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 1 August 1969, 13.

<sup>&</sup>lt;sup>5</sup> "Air War in the DMZ, September 1967 – June 1968," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 1 August 1969, 14-15.

<sup>&</sup>lt;sup>6</sup> Oral History Transcript, Lieutenant General John A. Chaisson, U.S. Marine Corps (Retired), History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C., 1975, MCHI, Quantico, 134.

On September 11, an intensified air campaign, code named Neutralize, began. Over six weeks, 1,436 Air Force, 1,584 Marine, 65 Navy, and 820 B-52 sorties pounded away at the enemy artillery positions north of Con Thien. U.S. warships and Marine artillery contributed to the effort. The airspace for Neutralize was north of the FBL, and therefore under Momyer's control. There were still issues. Since the Marine artillery could reach north of the DMZ, there were deconfliction problems with Momyer's aircraft, primarily FACs. On more than one occasion, FACs had to evade an artillery barrage. The Marines, on the other hand, became frustrated with what they found as excessive 'hold fire' orders placed upon the artillery units by the ABCCC.<sup>7</sup> Despite the continued problems with coordination between two of Westmoreland's components, he called the battle, "another Dien Bien Phu, but in reverse." Journalists had earlier used the Dien Bien Phu analogy to invoke a picture of hopelessness for the Marines at Con Thien, just as the French had faced in 1954. When the communists withdrew, Westmoreland used the same analogy to illustrate the difference between the Americans and French. Superior firepower, and most importantly, the full support of attack airpower took a besieged outpost and turned it into a defeat for the communist forces. Momyer later wrote, airpower "finally broke the siege of these northern bases, which had been under intensive attack for more than 49 days." He also believed that "it was the constant pounding of airpower that the enemy had not foreseen when planning this offensive." In a prediction that would soon be proved drastically off of the mark, a newspaper columnist wrote, "although it is unlikely the Con Thien defeat will bring Hanoi's leaders to the bargaining table, there is a feeling by some in Washington that the magnitude of the defeat may result in a tapering off of the Communist assaults."10

It was not only the control and application of airpower in actual operations, but also the discussions in planning for future operations that continued to throw fuel on the fire of the tenuous relationship between Momyer and Cushman. III MAF personnel were developing secret plans for a potential

\_

<sup>&</sup>lt;sup>7</sup> "Air War in the DMZ, September 1967 – June 1968," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 1 August 1969, 15.

<sup>8</sup> As quoted in "Two Victories at Con Thien," Chicago Sun-Times, 7 October 1967, 11.

<sup>&</sup>lt;sup>9</sup> Momyer, Airpower in Three Wars, 337–340.

<sup>&</sup>lt;sup>10</sup> "Two Victories at Con Thien," Chicago Sun-Times, 7 October 1967, 11.

amphibious operation north of the DMZ. Westmoreland designated Cushman as the joint land forces commander during the operation.<sup>11</sup> As had been the case in doctrinal debates following World War II, the Marines desired to maintain operational control of the air above the operating area after the termination of the amphibious operation. Momyer disagreed. He believed the Marines should relinquish control of the air at the termination of the assault and was, therefore, not pleased with the plan. 12 In the planning for York II, an operation involving both Army and Marine personnel, Cushman, who had overall planning authority, again proposed to give the 1st MAW commander operational control of all air support. Again, Momyer protested. He believed the support relationship between Army forces and Seventh Air Force was well established, proven under fire, and should not be disaggregated. Because the joint operation brought a level of complexity, Momyer felt only the Seventh Air Force system of operational control could best direct airpower in the battle. Momyer offered to assimilate 1st MAW operations within the Seventh Air Force control apparatus.13

When it came to discussions, Momyer and Cushman had been equals in rank. Both three star generals without formal lines of authority connecting them, the only method for change was the logic of their arguments or the influence with the man who had the power over both, COMUSMACV. Earlier in 1967, Air Force Lieutenant General George Brown, who was then serving as Wheeler's Assistant, confronted McConnell about Momyer's rank and responsibility. Brown believed "there were four-star generals sitting around commanding much less than Momyer was and doing much less of a job." He told McConnell point-blank, "This is wrong; you ought to make command of the

<sup>&</sup>lt;sup>11</sup> Message from COMUSMACV to COMSEVENTHFLT and CG III MAF, 160518Z, 16 December 1967, AIR CONTROL (SPECAT VOL 1), December 1, 1967, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>12</sup> Message from Cushman to Krulak, 281502ZZ, 28 December 1967, AIR CONTROL (SPECAT VOL 1), December 1, 1967, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>13</sup> Message from Momyer to Westmoreland, 281145Z, 28 December 1967, AIR CONTROL (SPECAT VOL 1), December 1, 1967, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

Seventh a four-star slot."<sup>14</sup> On December 14, 1967, General Westmoreland and his deputy, General Creighton W. Abrams, pinned the fourth star on Momyer's uniform.<sup>15</sup> Had Momyer been in the states, Pat would certainly have helped put the new rank on his shoulders. She, after all, had been his north through the ups and downs of Air Force life. Westmoreland recalled, "Everybody got a laugh when I asked General Abrams to serve as proxy for Mrs. Momyer."<sup>16</sup> The addition of another star elevated Momyer's status as Westmoreland's deputy for air. There were now only three four star generals in South Vietnam - Westmoreland, Abrams, and Momyer. Although no direct evidence suggests the Air Force was positioning Momyer for the discussions to come, the addition of another star on his uniform provided more firepower for the contentious debate.

In a bit of mentorship and jest in his congratulatory note, Disosway wrote, "now that you have got four stars, let some of those other people over there do part of the work and save yourself for something in the future." In an earlier letter, Ryan also chided Momyer for his work ethic. "I was serious when I told you that I expected you to get out of that place prior to [Major General Gordon F.] Graham's departure," Ryan wrote. "I strongly recommend that you take some leave before he goes. No man is made of iron and I think a week to ten days break for you is most appropriate." Momyer's work ethic had consequences, but his in-depth knowledge of his business created a staunch and studied proponent of airpower.

As 1967 drew to a close, intelligence indicated another enemy offensive in I Corps was building. From all indications, two NVA divisions were moving into the area surrounding Khe Sanh. The combat base near the border of Laos in northern I Corps had seen a large amount of enemy activity in the spring of

<sup>&</sup>lt;sup>14</sup> Edgar F. Puryear, Jr., *George S. Brown, General, U.S. Air Force, Destined for Stars* (Presidio Press, Novato, California, 1983), 164.

<sup>&</sup>lt;sup>15</sup> "General Momyer Receives Fourth Star," Headquarters Seventh Air Force, News Release, December 14, 1967, K740.951-2, IRIS No. 00527896, AFHRA.

<sup>&</sup>lt;sup>16</sup> Thursday, 14 December, William C. Westmoreland History File No 26, 26 Nov – 16 Dec 67, CMH.

<sup>&</sup>lt;sup>17</sup> General Gabriel P. Disosway, Commander, TAC, to General William W. Momyer, Commander, Seventh Air Force, Letter, December 8, 1967, 168-7041-3, IRIS No. 01042242, from General Momyer Papers, AFHRA.

<sup>&</sup>lt;sup>18</sup> General John D. Ryan, Commander in Chief, USAF, to Lieutenant General William W. Momyer, Commander, Seventh Air Force, Letter, June 26, 1967, 168.7041-3, IRIS No. 01042242, from General Momyer Papers, AFHRA.

1967 and the enemy trend of timing operations with the seasons continued. The Marines reinforced the outpost at Khe Sanh with a second battalion in reaction to the building threat. 19 The buildup of enemy forces in the area evoked mental images of the 1954 battle of Dien Bien Phu. The President, among others, envisioned the developing situation at Khe Sanh as one of strategic significance. During Christmas of 1967, President Johnson made a surprise evening visit to Korat Royal Thai Air Force Base in Thailand to visit with the Airmen who were fighting the war over North Vietnam. Momyer was there to greet him as he stepped off of the plane. After spending the night, Momyer accompanied the President on his early morning flight to Cam Ranh Bay in South Vietnam. During the trip, Momyer briefed the President on his actions against the enemy build-up and infiltration into South Vietnam. 20 When President Johnson brought up the question of defending Khe Sanh, Momyer "reassured him that with the massive use of airpower, the base could be defended."21

As the enemy moved troops and personnel into the area surrounding Khe Sanh, General Westmoreland prepared for battle. On January 6th he wrote, "The anticipated build-up of enemy forces in the western DMZ area provides an opportunity to plan a comprehensive intelligence collection effort and to make preparations for coordinated B-52 and tactical airstrikes." Westmorland ordered Momyer to "prepare a plan to concentrate all available air resources into the Khe Sanh area." This operation was called Niagara – the goal was to disrupt a major potential offensive by the enemy in the northern portions of South Vietnam.<sup>24</sup>

<sup>&</sup>lt;sup>19</sup> Major Gary L. Telfer, Lieutenant Colonel Lane Rogers, and V. Keith Fleming, Jr., *U.S. Marines in Vietnam: Fighting the North Vietnamese, 1967* (History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C., 1984), 147.

<sup>&</sup>lt;sup>20</sup> President's Daily Diary, December 23, 1967, LBJ Library, available from http://www.lbjlibrary.org/collections/daily-diary.html

<sup>&</sup>lt;sup>21</sup> Momyer, Airpower in Three Wars, 340.

<sup>&</sup>lt;sup>22</sup> As quoted in "Khe Sanh (Operation Niagara), 22 January – 31 March," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 4-5.

<sup>&</sup>lt;sup>23</sup> Message from General Westmoreland to Admiral Sharp and General Wheeler, AIR CONTROL (SPECAT VOL 1), January 1, 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>24</sup> HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, "Project CHECO Report: Khe Sanh (Operation Niagara), 22 January–31 March", 1.

In early 1967, Ho Chi Minh had directed the Central Committee to assess the strategic direction of the war. With these orders, the Committee decided upon, "a spontaneous uprising in order to win a decisive victory in the shortest possible time."25 Their guidance to the field was, simply, "to attack the Americans and force them to military defeat in order to change the scope of the Vietnam War." Giap translated this intent with a three phase operational plan. Phase 1 involved attacks with NVA units across the periphery of South Vietnam. Giap hoped to pull American forces out of the populated areas to provide the VC an opportunity to exploit their absence. He also believed the big battles generated more American casualties and would continue to wear away American support for the war effort. In Phase 2, Viet Cong main force units were to attack cities around the country. Their military targets were the ARVN forces, American headquarters, and air bases. They were to follow up with a political effort to win over the support of the people of South Vietnam. In the final phase, the NVA was to attain a victory at Khe Sanh and a final, victorious assault against the cities. <sup>26</sup> The objectives for the communist forces near Khe Sanh were to "eliminate a large number of American and South Vietnamese personnel, primarily Americans if conditions presented themselves, destroy a part of the enemy's defensive line on Highway 9, and to continue into other areas around Tri-Thien Hue to draw in American and South Vietnamese forces from other battlefields – the more the better."27

Remarkably, Westmoreland's conceptual approach played into Giap's strategy. In outlining his strategy for Wheeler, Westmoreland wrote, "the enemy has chosen to concentrate major elements of his NVA forces along the borders . . . so that he can launch major attacks to gain a psychological and political victory, while at the same time retaining the best hope of disengaging when defeated." Westmoreland believed, "when the enemy moves across the borders we must strike him as soon as he is within reach, and before he can gain a

\_

<sup>&</sup>lt;sup>25</sup> Phillip B. Davidson, *Secrets of the Vietnam War* (Presidio Press, Novato, California, 1990), 98.

<sup>&</sup>lt;sup>26</sup> Phillip B. Davidson, *Secrets of the Vietnam War* (Presidio Press, Novato, California, 1990), 98.

<sup>&</sup>lt;sup>27</sup> "B5-T8 in 48 QXD, The Secret Official History of the North Vietnamese Army of the Siege at Khe Sanh, Vietnam, 1968," translated by Sedgwick D. Tourison, Jr., edited by Ray William Stubbe Wauwatosa, Wisconsin, 2006, 5.

victory to tyrannize the local population." Westmoreland recognized the concerns of those who felt the pacification mission should take first priority in South Vietnam. Air mobility via helicopters and tactical airlift allowed Westmoreland to move forces rapidly to meet the threat. He believed using his forces in this manner had little impact to the pacification mission, but made a large contribution to the fight with the NVA forces. As soon as possible, often when the enemy withdrew back across the borders, Westmoreland redeployed his forces to the population centers. In this manner, Westmoreland treated the coastal areas as his reserve force, shifting the weight of his effort as the situation required. "I can see absolutely no psychological or military advantage to a strategy that would intentionally invite the war east towards the coast," Westmoreland wrote, refuting the critics of his strategy, "it would be retrogressive, costly in casualties and refugees, and almost certainly prolong the war." Westmoreland did not see pacification as an either/or problem set. "The idea that we can't fight the enemy along the borders," Westmoreland wrote, "without seriously diverting forces from the populated areas is not entirely sound."28

Momyer returned from a January 9th MACV intelligence brief and wrote a memorandum to his staff. "The enemy now has the better part of the 325th, 304th and 320th Division in the vicinity of Khe Sanh," he wrote, "from the disposition of these forces, it would appear that Khe Sanh is the intended target." The brief provided Momyer with a hint of what lie ahead. Moreover, the, "build-up of forces and materiel seems to indicate a much broader objective than Khe Sanh," Momyer wrote, and the enemy "may be in the midst of a major build-up to wrest the initiative from us throughout the country." Momyer believed, "all of the talks of negotiation may be a trap to get the bombing stopped so as to accelerate the delivery of more equipment into SVN with the objective of a military victory in 1968." <sup>30</sup>

<sup>&</sup>lt;sup>28</sup> Message from Westmoreland to Wheeler, MAC 11956, 10 December 1967, William C. Westmoreland, History File No 26, 26 Nov – 16 Dec 67, CMH.

<sup>&</sup>lt;sup>29</sup> As quoted in Khe Sanh (Operation Niagara), 22 January – 31 March," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 5.

<sup>&</sup>lt;sup>30</sup> As quoted in Khe Sanh (Operation Niagara), 22 January – 31 March," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 5.

While Westmoreland and Momyer determined the path ahead, officials in Washington, D.C. attempted to construct their own plan. "There is discussion around town in high non-military quarters of what the enemy objectives and actions may be in the Khe Sanh area," Wheeler wrote to Westmorland. There were two general views. The first was to strike out at the enemy from Khe Sanh and into Laos. The second, to withdraw American forces back to the populated areas.<sup>31</sup> Wheeler presented both opinions to Westmoreland for his response. Westmoreland felt the two views were "tantamount to desperation tactics on the one hand and defeat on the other." Westmoreland did not believe an invasion into Laos was politically or militarily feasible and strongly believed any attempt to retreat to into populated areas, "merely returns the center of the violence to the midst of the RVN people in the populated centers."<sup>32</sup> Sharp added his endorsement to Westmoreland views. "In the event a major attack against Khe Sanh materializes," he wrote, "it will be fought on our terms, on our ground, and within supporting range of our weapons."<sup>33</sup>

Sharp, like Westmoreland, found abandonment of Khe Sanh, "unthinkable – the frontier would become contiguous to the heavily populated lowlands of Quang Tri-Than Thien provinces and the enemy would be given, uncontested, that which he has paid dearly for but has been unable to acquire in the past." Sharp believed an American surrender of positions at Khe Sanh would create a significant propaganda gain for the communist forces and result in the degradation of the sensor systems in place throughout the region. In addition, "the military approaches to the coastal areas of Quang Tri province would be exposed and the enemy would be provided uncontested access to Northern I CTZ flanking USMC positions in Northern Quang Tri province."<sup>34</sup>

Cushman agreed with Sharp. When later asked what he thought of holding Khe Sanh, Cushman replied, "Yes, I thought we ought to hold it. It

<sup>&</sup>lt;sup>31</sup> Message from Wheeler to Westmoreland, JCS 00343, 11 January 1968, William C. Westmoreland Collection, Box 7, Folder 5, MHI, Carlisle Barracks.

<sup>&</sup>lt;sup>32</sup> Message from Westmoreland to Wheeler and Sharp, MAC 00547, 12 January 1968, William C. Westmoreland Message File COMUSMACV, William C. Westmoreland Papers, Center for Military History.

<sup>&</sup>lt;sup>33</sup> Message from Sharp to Wheeler, 142146Z, 15 January 1968, William C. Westmoreland Collection, Box 7, Folder 5, MHI, Carlisle Barracks.

<sup>&</sup>lt;sup>34</sup> Message from Sharp to Wheeler, 142146Z, 15 January 1968, William C. Westmoreland Collection, Box 7, Folder 5, MHI, Carlisle Barracks.

really was the left flank of the whole mobile defense line up there."<sup>35</sup> Westmoreland later recalled, "Cushman and I had a meeting and the idea is that we would fortify that ground and we would try to entice the enemy to battle in a non-populated area rather than giving it up and have him - - have us have to fight him in the lowlands among the people where every fire mission, every air strike would have to be cleared through the province chief and district chief."<sup>36</sup> By fighting the enemy away from the populated areas, Westmoreland hoped to leverage his asymmetric advantage – airpower.

With this in mind, Westmoreland set out to ensure Momyer had every tool he needed for success. One of these tools was the anti-infiltration sensors in the jungles near the Laotian border. This was the 'air supported' section of McNamara's notorious, but still closely guarded, anti-infiltration barrier. This section of the barrier, then code-named Muscle Shoals, had two separate components. One, code-named Mud River, sensed and reported vehicular traffic along the Ho Chi Minh Trail. The other, code-named Dump Truck, monitored the movement of personnel in eastern Laos and north-western South Vietnam. Although both served an important purpose, Dump Truck was the most applicable to the fight for Khe Sanh. As a system, Dump Truck had three components: a mix of air delivered sensors and munitions to detect and impede enemy movement by foot, aircraft overhead to receive and transmit the information from the sensors, and an Infiltration Surveillance Center (ISC) at Nakon Phanom Air Base in Thailand to analyze the indications and provide feedback to ground forces and the TACC for airborne interdiction taskings. The ISC fell under Momyer's operational control and was known as Task Force Alpha. Momyer saw the integrated sensor system as another set of 'eyes' for his striking force.37

To deploy and monitor the sensors, Westmoreland granted Momyer primary control of a small section of airspace in the western half of northern I

3!

<sup>&</sup>lt;sup>35</sup> Oral History Transcript, General Robert E. Cushman, Jr., U.S. Marine Corps (Retired), Benis M. Frank Interviewer, History and Museums Division, Headquarters, U.S. Marine Coprs, Washington, D.C., 1984, 20.

<sup>&</sup>lt;sup>36</sup> Marine Corps Oral History, Interview of General William C. Westmoreland, April 4, 1983, Marine Corps Historical Center, Washington Navy Yard, Washington, D.C., p. 35, USMC History Division, Quantico.

<sup>&</sup>lt;sup>37</sup> "Igloo White (Initial Phase)," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 31 July 1968, 3-5.

Corps on January 12th. This was a significant move, as it gave Momyer control of a segment of airspace normally controlled by the Marines. As a subtle reminder to Cushman and Momyer, his two commanders who often feuded over airspace control, Westmoreland ordered his subordinate commanders to "provide COMUSMACV with a coordinated, joint position, for finalization and approval."<sup>38</sup>

As the threat continued to build in I Corps, Westmoreland deployed his forces to reinforce the Marines. On the 17th of January, the 1st Air Cavalry Division minus one brigade began to deploy to Hue/Phu Bai, a base along the coast of South Vietnam, 70 miles to the east of Khe Sanh.<sup>39</sup> Prompted by these deployments and after a staff meeting in Saigon, Westmoreland asked Momyer and Abrams to come to his office for further discussions. Westmoreland told the two he planned to deploy even more forces to the I Corps region. Momyer stated, in no uncertain terms, with the rapidly evolving tactical situation in I Corps, it was mandatory for Westmoreland to "have more flexibility for the employment of his air resources." Momyer recommended Westmoreland centralize the control of air resources under the office of Deputy Commander MACV for Air, meaning himself.<sup>40</sup>

After making this recommendation, Momyer continued with his reasoning and a proposal for the way ahead. He believed time was critical to ensure airpower could be applied effectively and to its full effect if an enemy offensive developed. Momyer outlined his perceptions of the problem areas in the current command and control arrangement. B-52 coordination, overlap between attacks in Laos and those in western South Vietnam, attacks in the vicinity of the DMZ, the maintenance of Dump Truck and the sensor system, and the air support requirements of the increasing number of Army units moving into I Corps were just some of the examples he marshaled for his case.

\_

<sup>&</sup>lt;sup>38</sup> Message from Westmoreland to Momyer and Cushman, 121110Z, 12 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>39</sup> Message from Westmoreland to Sharp, MAC 00992, 21 January 1968, William C. Westmoreland Message File COMUSMACV, 1 Jan – 31 Jan 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>40</sup> Momyer Memorandum for Record, 18 January 1968, Supporting Document #1 in HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, "Project CHECO Report: Single Manager for Air in SVN," March 10, 1969.

Westmoreland, wanting other perspectives on the problem, called in other senior Army generals on the MACV staff. "All agreed," Momyer wrote in a memorandum for record recounting the details of the meeting, "that the changing situation in I Corps made such an operational change necessary." General Palmer, one of the generals in attendance, prophetically added the journey would be tough because of the implications for Marine doctrine.<sup>41</sup>

After more discussion, Westmoreland decided to put the required mechanisms in motion. He directed Momyer and Major General Walter Kerwin, now Westmoreland's chief of staff, to draft a letter to Sharp and to Cushman, informing them of the considerations for a change in the management of air assets. Momyer and Kerwin did as directed, and the message was dispatched with Westmoreland's signature. "A long standing problem has finally been brought out in the open for resolution," Momyer concluded in his memo, "the action of the enemy these past few weeks have pointed out the absolute necessity for having our command structure more responsive to the tactical situation."<sup>42</sup>

The message to Cushman read, "in view of the increased deployment of Army forces into I Corps, impending battles and the need for having more operational flexibility of the air effort available to me, I am contemplating placing operational control of the I Marine Air Wing under my Deputy for Air." Westmoreland suggested, "in view of the enemy build up, it is imperative that I be in the best feasible posture to meet this threat," and, "I believe centralizing control of the air resources will promote this requirement." Knowing the proposed actions were controversial, Westmoreland added, "I am proposing this operational control arrangement as temporary measure to meet the current situation." Westmoreland requested Cushman's views on the matter and sent Momyer to the III MAF headquarters at Da Nang to discuss the issue with Cushman and Anderson. Upon receipt of the message, Cushman immediately forwarded it to Lieutenant General Victor Krulak, the Commander of Fleet

<sup>&</sup>lt;sup>41</sup> Momyer Memorandum for Record, 18 January 1968, Supporting Document #1 in HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, "Project CHECO Report: Single Manager for Air in SVN," March 10, 1969.

<sup>&</sup>lt;sup>42</sup> Momyer Memorandum for Record, 18 January 1968, Supporting Document #1 in HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, "Project CHECO Report: Single Manager for Air in SVN," March 10, 1969.

Marine Forces Pacific, with a comment. "Momyer due to arrive 181000H for discussions," he wrote, "appreciate any input you can provide prior to mtg, and other assistance at your level."<sup>43</sup>

'Brute' Krulak had famously fought for the very existence of the Marine Corps in the days following World War II. Although he was the senior Marine in the Pacific, Krulak was not in Cushman's operational chain of command. For operations, Cushman reported to Westmoreland. But through a series of 'Marine Eyes Only' messages, Krulak provided Cushman with supporting material in his fight for the control of Marine aviation. In effect, much of the early debate had Krulak in one corner and Momyer in the other, going punch for punch in the prize fight for air control. Momyer, who later called the absence of centralized control over Marine air in Vietnam "a constant and irritating problem," was well known to the Marines as a staunch advocate of the centralized operational control of air assets. When he arrived in theater, Momyer had infamously told the III MAW Commander one of his main objectives was to get operational control of Marine aviation assets.

A mere nine hours after receiving Cushman's message, Krulak provided a detailed reply with a comprehensive plan of attack. "Here is my input, in a nutshell, be tough," he began, "be tough not in terms of Marine doctrine or policy, but in terms of the best interests of the USA. Leave no doubt in Momyer's mind that you are not giving an inch on the Marine Air/ground Team, and then put your strong dissent in writing to Westy, so there can be no question as to where you stand."

Krulak then detailed his suggestions for Cushman's defense. "As to tactics, I suggest that you proceed in two phases; first a recorded, repeat

<sup>&</sup>lt;sup>43</sup> Message from Cushman to Krulak, 171402Z, 17 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>44</sup> General William Momyer, End of Tour Report, K740.131, IRIS# 00524451, AFHRA, November 1970, 7.

<sup>&</sup>lt;sup>45</sup> Marine Corps Oral History, Interview of Lieutenant General Keith B. McCutcheon, USMC, 22 April 1971, p. 7, MCHI, Quantico, Virginia.

<sup>&</sup>lt;sup>46</sup> Message from Krulak to Cushman, 172259Z, 17 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

recorded, meeting today with Momyer, where you ask him hard questions aimed at exposing weaknesses in his scheme and the ultimate costs to our combat effort; then a strong message to Westy, reciting selected points made by Momyer, along with refutation of each, and followed by a succinct and unequivocal recommendation to leave the system alone." Krulak then listed nine general question areas for Cushman's discussion with Momyer. Provided in their entirety below, these questions framed the Marine perspective and genuine concerns on the proposed action:

- A. Just what benefits to the war effort do you foresee coming out of breaking up the tested Marine Air/ground team?
- B. What exactly are the authorities which you contemplate 7TH AF would exercise over 1st MAW?
- C. Outline how the tactical air control mechanism would work under your concept. Would you plan to augment the 7TH AF I Corps DASC? How, and for what purpose? In what respect would centralizing control in Saigon be superior to the system now employed in III MAF? Just how would the impending DMZ battle be influenced to our advantage under your scheme?
- D. Specifically, assuming we maintain our air control system as it is now operating . . . but under your operational control . . . where would approval be granted for each air request?
- E. This is not the first big battle we have had. Last May, we had a battle at Khe Sanh where in 1004 sorties we dropped 1502 tons of ordnance in close air support. The ground part of our team said that the close air support of 1st MAW was the decisive factor. How do you propose to improve on this?
- F. What advantages do you see to a III MAF requirement to place its requests for air support to 7th AF? What 7th AF resources are you planning to commit to support to ICTZ?
- G. Who, in your scheme, would make the decisions concerning the allocation and employment of air in support of the Marine ground forces in combat? Would you expect the support to be more timely as a result? In this regard, study by the JCS in 1966 showed Marine average response times to be approximately 33 minutes, as opposed to 38 minutes for USAF air . . . if you are given operational control of Marine Air do you believe it will improve our responsiveness?
- H. Have there been any observed deficiencies in the amount of air support or control associated with your support of the Americal Division that could have been corrected by your having operational control of the 1st MAW?
- I. Marine Air assets in RVN are predicated on precise requirements to support in-country infantry battalions . . . daily sorties in excess of these requirements are allotted to 7th AF now. Under your scheme, do you envision a greater diversion of Marine Air to tasks other than support of Marine operations than at present? If

you do, how can air support in the critical DMZ battle in prospect possibly be improved by a shift in operational control?

J. Marine DASCS presently are co/located with FSCC's at division level or, in special operations, at lower levels . . . USAF DASC co/locate with Army counterparts only at Corps level . . . do you envision a change in our existing air control structure if you are given operational control of USMC air? If so, how would you propose to accomplish fire support coordination? How would it be

K. If you take over operational control of the Marine Air, it seems inevitable that an additional layer must be added to approval channels for air requests, how can this fail to degrade in responsiveness?  $^{47}$ 

better?

In general, Krulak's questions illustrate a fear of losing both responsiveness to and authority for the Marine commander on the ground. "The above questions, and others like them," Krulak continued, "all couched in terms that exhibit your conviction that Momyer is simply following the Air Force line, to the detriment of the war effort, should give you the raw material for a very strong message to Westy."48

Krulak even provided Cushman with a four-part framework for his follow-on message to Westmoreland. First, he recommended Cushman stress he was "interested in winning the war and, specifically, in winning the ICTZ battle." Second, even though Krulak's message vividly illustrated this was not to be true, he recommended Cushman tell Westmoreland, "during Momyer's visit we explored in depth exactly what he has in mind, with respect to the III MAF air element. I found nothing whatever in the discussion to even suggest, any enhancement in air support performance. The reverse would actually eventuate." For the third part, Krulak recommended a list of Momyer's views on each topic covered and Cushman's reactions to those views. Finally, Krulak outlined Cushman's foregone conclusion. In essence, Krulak wrote, Sharp's original 1965 directive on the control of airpower, conceived of by McCutcheon,

<sup>&</sup>lt;sup>47</sup> Message from Krulak to Cushman, 172259Z, 17 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>48</sup> Message from Krulak to Cushman, 172259Z, 17 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

"has stood up well; that it recognizes the unity of the Marine air/ground team; that you are unalterably opposed to any change in CINCPAC's directive or to any fragmentation of the air/ground team."<sup>49</sup>

In an adept bureaucratic move, Krulak had already addressed the issue in person with Sharp, hours before Westmoreland could inform his superior of his concerns over the arrangement for air in I Corps. "I have already been to see Sharp and have told him what is up," Krulak told Cushman, "I told him that I was going to counsel you that this is the time to be resolute and as a result, estimated that he will be hearing from Westy on the subject." During their meeting, Krulak reviewed Sharp's original 1965 directive. Krulak, "urged him to stand firm on it . . . he understands the issue and I am certain he is favorably disposed to our case." <sup>50</sup>

These interactions set the stage for Momyer's trip to Da Nang on January 18th. Momyer's close working relationship with Westmoreland undoubtedly played a major role in Westmoreland's decision to investigate this contentious step. Momyer, much like Krulak, had his own unshakeable beliefs. Founded in the desert of North Africa, reinforced through Momyer's interpretations of his studies of air campaigns, and extensively thought out in numerous exchanges on air doctrine, Momyer saw little evidence to justify Krulak's position. Momyer felt the Marines kept a steady stream of air over the men on the ground, whether they needed it or not. From Momyer's perspective, this was anathema to the efficient employment of air resources. Although they would never see it from Momyer's eyes, some Marine officers even noticed how Marine aviation was pushed rather than pulled. Chaisson later recalled from his time on the III MAF staff, "this is my first experience of a relationship between the ground and air commander where the air commander is peddling fixed wing support. He's a

<sup>&</sup>lt;sup>49</sup> Message from Krulak to Cushman, 172259Z, 17 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>50</sup> Message from Krulak to Cushman, 172259Z, 17 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

seller."<sup>51</sup> Although it appeared Khe Sanh was the immediate threat, Momyer predicted a much broader scheme of attack across the area. If the Marines were not heavily engaged in one particular moment, he wanted to be able to use more than the currently allotted 30% of their total air effort. He also did not believe the Marine DASC had the capacity to control the amount of airpower required to thwart the enemy offensive in I Corps. Momyer felt his ABCCC and TACS were the optimum command and control platforms for success.<sup>52</sup>

There were other motivations. General McCutcheon, then serving as the Deputy Chief of Staff (Air) at Headquarters Marine Corps, remembered "we had copies of Air Force messages out of Seventh Air Force back to PACAF and Headquarters Air Force on this subject." McCutcheon remembered one of the indications from the messages, "was that, as the Khe Sanh battle began to develop, the Air Force was afraid that the Marine Corps might try to get OpCon of all air in that area since it was essentially the Marines' area of operations, that is, the five northern provinces under III MAF." To keep this from happening, McCutcheon believed the Air Force, "decided to take the offensive and do it themselves - this, in spite of our reiteration to the Air Force both in Vietnam and at Headquarters Air Force, that we had no desire whatsoever to take over any of their chores . . . we had enough of our own and we didn't want to take on any other problems."53 Momyer's commentary in his after action report provides evidence for this view. "The Marines held the view that they should control all air operations in I Corps," Momyer declared, "since the III Marine Amphibious Force was the senior US headquarters in charge of US operations in that area."54

As Momyer travelled to Da Nang and the III MAF Headquarters, Westmoreland deployed two additional Vietnamese Airborne Battalions to

\_

<sup>&</sup>lt;sup>51</sup> Oral History Transcript, Lieutenant General John A. Chaisson, U.S. Marine Corps (Retired), History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C., 1975, MCHI, Quantico, 46.

<sup>&</sup>lt;sup>52</sup> Momyer letter to Major General Robert Ginsburgh, Chief, Office of Air Force History, 23 May 1972, 168.7041-52, IRIS #1001164, AFHRA.

<sup>&</sup>lt;sup>53</sup> Marine Corps Oral History, Interview of Lieutenant General Keith B. McCutcheon, USMC, 22 April 1971, p. 9, MCHI, Quantico, Virginia.

<sup>&</sup>lt;sup>54</sup> General William Momyer, End of Tour Report, K740.131, IRIS# 00524451, AFHRA, November 1970, 7.

Hue.<sup>55</sup> The air was heavy with anticipation of the fight that was ahead. When Momyer arrived at Da Nang he had another fight on his hands. Cushman remembered the meeting well. "I put a tape recorder in the middle of the table," he recalled, "and said, 'This is all going to be on the record.' So, off we went, hour after hour; Major General Norm Anderson, my Marine wing commander, and myself on one side; Momyer on the other."<sup>56</sup> The three undoubtedly talked past each other for the entire meeting.

Shortly after Momyer left Da Nang, Cushman wrote to Westmoreland, sticking very closely to the Krulak plan of attack. As Krulak recommended, Cushman opened his note to Westmoreland with, "my only concern is in winning the war and specifically my energies and assets are focused upon winning the battle in I Corps area." However, Cushman wrote, "I have carefully reviewed all of the points analyzed and cannot find where any improvement in air support performance would eventuate. On the contrary there are several aspects which will degrade the present excellent efficiency and coordination." Cushman understood Momyer wanted to be able to shift air strikes anywhere across the country to meet the threat. He also knew Momyer believed only the 7th AF system had the capability to do it. But Cushman did not believe it. "On the contrary," Cushman wrote, "I am convinced that the ability exists now and that it can be done smoothly." With this in mind, Cushman stated, "it is therefore my conviction that the present system is smooth, efficient and responsive both to your requirements as the Joint Force commander and to mine as the commander of the Marine Air-Ground Team and the operational commander of III MAF forces."57

Cushman also believed Westmoreland already had the authority to take operational control of Marine aviation in an emergency. This caveat was written

<sup>&</sup>lt;sup>55</sup> Message from Westmoreland to Sharp, MAC 00992, 21 January 1968, William C. Westmoreland Message File COMUSMACV, 1 Jan – 31 Jan 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>56</sup> Oral History Transcript, General Robert E. Cushman, Jr., U.S. Marine Corps (Retired), Benis M. Frank Interviewer, History and Museums Division, Headquarters, U.S. Marine Coprs, Washington, D.C., 1984, 59.

<sup>&</sup>lt;sup>57</sup> Message from Cushman to Westmoreland, 181352Z, 18 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

into MACV directive 95-4.58 When Westmoreland was later asked about MACV 95-4 and the emergency clause, he replied, "Well, I had a deputy, I didn't worry about something like that. I had a deputy and he never told me anything like this." When the interviewer pressed Westmoreland, inferring he should have known his own directives, Westmoreland responded, "But that's not what Momyer told me . . . maybe Momyer didn't know anything about it." Westmoreland elaborated, "I had a lot of things on my plate and I had a deputy that I looked to do this. And Momyer was wringing his hands, he apparently didn't know about it, but maybe he did. I have no recollection of him discussing with me if that arrangement . . . I wanted to work out some arrangement that would satisfy all parties. And Momyer wasn't able to do that."<sup>59</sup>

Westmoreland must have known about his emergency authority. It appeared in many of the messages on the subject. Even if Momyer drafted every message, it was still a central component of the conversation. With Momyer's detail oriented leadership and capacity for complete mental dominance of every aspect of his job, it is doubtful he overlooked Westmoreland's emergency authority. Momyer portrayed the building enemy threat in I Corps as the emergency. Because operational control of Marine aviation could not occur instantaneously, Momyer preferred to coordinate in the days before the assault occurred.

Even after bringing up the emergency authority and admitting a serious threat was building, Cushman held his ground. "There is at present unity of command in ICTZ where the major threat admittedly exists," and, "to destroy this unity by superimposing another layer of control and coordination will not, in my opinion, increase effectiveness or efficiency. To the contrary, to substitute a different system of air control for one that is well understood, responsive and productive, would serve only to decrease the responsiveness and

<sup>&</sup>lt;sup>58</sup> Message from Cushman to Westmoreland, 181352Z, 18 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>59</sup> Marine Corps Oral History, Interview of General William C. Westmoreland, April 4, 1983, Marine Corps Historical Center, Washington Navy Yard, Washington, D.C., p. 36-37, USMC History Division, Quantico.

efficiency of our support in ICTZ." Cushman believed losing operational control of his organic aviation assets, "would have the effect of replacing my aviation commander and control over his assets with one who is not directly under my command; yet my overall operational responsibilities in I CTZ remain the same." In his summary, Cushman used the current state, as provided for in the April 1965 CINCPAC directive, as a sound basis for future operations, "for not only accomplishing the objective of air power flexibility which you require, but for also recognizing the unity of the Marine Air/ground team as a combat entity, which together is more powerful than just the sum of its individual parts." He boldly concluded, "I must therefore state that am unalterably opposed to any change in CINCPAC's directive, and to any fractionalization of the Marine air/ground team." In two separate messages, Cushman forwarded his response to both Krulak and General Leonard F. Champman, the Commandant of the Marine Corps. 19

On the same day he received Cushman's reply, Westmoreland forwarded his message on the situation to Admiral Sharp. Momyer's fingerprints were apparent throughout the reply. "In view of the increasing deployment and the impending major battle," Westmoreland cabled, "it has become apparent that there needs to be an immediate major change in the control of tactical air in I CTZ." Westmoreland continued, "the changing situation places a demand for greater organization and control of air resources and a premium on the need for rapid decision making." Reflecting one of Momyer's most firmly held beliefs, Westmoreland wrote, "it is no longer feasible nor prudent to restrict the employment of the total tactical air resources to given areas," because, "I feel

<sup>&</sup>lt;sup>60</sup> Message from Cushman to Westmoreland, 181352Z, 18 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>61</sup> Message from Cushman to Krulak, 182210Z, 18 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University; Message from Cushman to Chapman, 190332Z, 19 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

the utmost need for a more flexible posture to shift my air effort where it can be used in the coming battles."62

Not surprisingly, Sharp's reply to Westmoreland was nearly instantaneous. He knew what Westmoreland was going to say before he said it. Krulak had prepared him well. Sharp likely already had the response ready to send. He predicted this discussion was destined to play out in the JCS and, in recognition of this supposition, he forwarded his reply to Generals Wheeler, McConnell, Chapman, and Krulak as well. "Current policy for the conduct and control of close air support in SVN is prescribed in [CINCPAC 242345Z APR 65] msgl," Sharp wrote, and "these ground rules have worked well for nearly three years of combat." Sharp believed the PACOM structure was doctrinally correct and warned Westmoreland of the dangers of creating waves with a control shake-up. "I know that you are aware that we can find as many differing viewpoints on tactical air control as we have people to serve as their sponsors," Sharp wrote, and, "my goal has been to establish procedures which satisfy operational requirements, while minimizing the inter-service debate which has much newspaper appeal but little in the way of constructive suggestion."63 Sharp wanted Westmoreland to review the results of the meeting between Momyer and Cushman before submitting his plan.

After receiving Sharp's reply, Westmoreland met with Momyer and Abrams to discuss the ramifications. Westmoreland believed the control of Marine aviation was now framed in terms of roles and missions. Although Westmoreland still favored Momyer's operational control of Marine aviation, any roles and missions debate was not likely to be solved in the near term and had at least JCS, if not congressional and presidential ramifications. Despite this obstacle, Momyer sought to delineate responsibilities in I Corps as much as he could. Momyer offered, and Abrams agreed, support for any Army unit in I Corps should be provided by Seventh Air Force. Westmoreland agreed and gave

<sup>&</sup>lt;sup>62</sup> Message from Westmoreland to Sharp, MAC 00797, 18 January 1968, William C. Westmoreland Message File COMUSMACV, 1 Jan – 31 Jan 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>63</sup> Message from Sharp to Westmoreland, 182231Z, 18 January 1968, William C. Westmoreland Message File COMUSMACV, 1 Jan – 31 Jan 1968, William C. Westmoreland Papers, CMH.

Momyer air support responsibility for 1st Cavalry and the 23rd Infantry Division (Americal Division).<sup>64</sup>

Concerning the immediate threat in Khe Sanh, Momyer recommended a focused operation under his operational control. Westmoreland directed Momyer to write a message to Cushman addressing the arrangements. "This isn't the best solution to the problem of air support," Momyer wrote, "but it is probably realistic under the current circumstances." Momyer's frustration was apparent in the memo's conclusion. "Admiral Sharp and the Marines would fight the issue clear up to the JCS," he wrote, "in the meantime, we have a crisis developing at Khe Sanh," and "if the battle at Khe Sanh develops, it may be the event to get the air responsibilities straightened out like we had them in Korea and World War II."65

This passage revealed a distinct weakness in Momyer's frame of reference for the use of doctrine, history, and experience. Best used, doctrine was a starting point and not a destination. Better said and more than a semantic difference, it was the situation at Khe Sanh and throughout I Corps which called for the centralization of the control of airpower and not Khe Sanh as a means to the end of centralized control. Khe Sanh was not World War II or Korea, but some of the same principles of airpower still applied.

As Westmoreland directed, Momyer wrote to Cushman on the 19th of January to inform him he was "preparing an outline plan to insure that all elements of air planning for support of Operation Niagara are complete and that command, control, and coordination arrangements among forces involved are adequate to the full scale of intensity of possible air operations." As Cushman received Momyer's note, he received another one from Westmoreland instructing him to deploy the 3rd Brigade of the 1st Air Cavalry Division from an operating

<sup>&</sup>lt;sup>64</sup> Momyer Memorandum for Record, 21 January 1968, Supporting Document #6 in HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, "Project CHECO Report: Single Manager for Air in SVN," March 10, 1969.

<sup>&</sup>lt;sup>65</sup> As quoted in "Single Manager for Air in SVN," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 10 March 1969, 3.

<sup>&</sup>lt;sup>66</sup> As quoted in Khe Sanh (Operation Niagara), 22 January – 31 March," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 8.

area in southern I Corps to Hue/Phu Bai to join the rest of the division.<sup>67</sup> To his other field forces commanders Westmoreland wrote, "as a result of the current enemy buildup in Quang Tri province, I am shifting the full weight of our Arc Light effort in that area effective at once." Westmoreland emphasized only he could approve B-52 diversions into other areas and only in the case of an emergency.<sup>68</sup>

On the 20th of January, Westmoreland instructed General Weyand, now serving as the II Field Force commander, to deploy the 2d Brigade of the 101st Airborne Division to Hue/Phu Bai. Momyer's airlift machine was hard at work moving Westmoreland's forces to meet the threat.<sup>69</sup> Shortly thereafter, Westmoreland directed Momyer to divert any and all useful sensor assets for 'Dump Truck' to the Quang Tri area.<sup>70</sup>

As the preparations for the pending battles in I Corps continued at full steam, Cushman updated Westmoreland on the status of control arrangements for Durango City, the proposed diversionary amphibious assault north of the DMZ. Major General Gordon F. Blood, Momyer's deputy chief of staff for operations, had recently travelled to Da Nang to confer with Anderson. Momyer, Blood relayed to Anderson, was concerned "about all phases of the operation and considered the control of tactical air in the normal manner (through the ABCCC) the only arrangement satisfactory to the 7AF." In Cushman's plan, as it was in December, Anderson was to maintain air control over the objective area even after the end of the amphibious operation. Cushman explained the Marine position to Westmoreland. "It is imperative that all supporting arms, air, artillery, and naval gun fire be coordinated by agencies directly responsible to the overall commander," he wrote, and "the transition of

 $<sup>^{67}</sup>$  Message from Westmoreland to Sharp, MAC 00992, 21 January 1968, William C. Westmoreland Message File COMUSMACV, 1 Jan – 31 Jan 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>68</sup> Message from Westmorland to Rosson and Weyand, MAC 00862, 19 January 1968, William C. Westmoreland Message File COMUSMACV, 1 Jan – 31 Jan 1968, William C. Westmoreland Papers, CMH.

 $<sup>^{69}</sup>$  Message from Westmoreland to Sharp, MAC 00992, 21 January 1968, William C. Westmoreland Message File COMUSMACV, 1 Jan – 31 Jan 1968, William C. Westmoreland Papers, CMH.

Message from Westmoreland to Sharp, MAC 00992, 21 January 1968, William C. Westmoreland Message File COMUSMACV, 1 Jan – 31 Jan 1968, William C. Westmoreland Papers, CMH.

control from advance force operations, through the assault, to operations ashore must be orderly, coordinated, and appropriate to the tactical situation." To Cushman, the appropriate role for Momyer's command was "the attack of targets in areas contiguous to the AOA/AO, interdiction of LOCs leading to the objective area, provision of tactical air support to engaged Army and ARVN unit, and air defense operations." Momyer disagreed. He lobbied Westmoreland for control of the operating area upon termination of the amphibious assault and cited "joint Army/Air Force doctrine, MACV directives, and the experiences of previous wars to show that a single tactical air commander should exist." This left Westmoreland with another, slightly less pressing, decision on the control of airpower. The timing of this disagreement had only negative influence on the quest for harmony in I Corps air control.

The 20th was not the first, and would not be the last, very long day for Westmoreland. That evening he received a message from Krulak, once again with Wheeler, Sharp, McConnell and Champman as information addressees. "As a supporting commander, providing people and things, my main purpose is to help you win the battle," Krulak wrote, "how the Marine tools are used, once they get to Vietnam, is not my province." In an instant caveat, however, Krulak thanked Westmoreland for being open to his thoughts and began another detailed and masterful defense of the Marine air/ground team. This time, Krulak did not use Cushman as his avenue but went direct to the source, illustrating the urgency he felt in attempting to reason Westmoreland to renege.<sup>73</sup>

Krulak addressed Westmoreland's rationale for making the change to the single manager for air, point by point. Addressing Westmoreland's concern with the growing Army presence in I Corps, Krulak wrote, "Army strength changes have been accompanied by a corresponding rise and fall in the level of USAF air

<sup>&</sup>lt;sup>71</sup> Message from Cushman to Westmoreland, 201630Z, 20 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>72</sup> "Air War in the DMZ, September 1967 – June 1968," HQ PACAF, Directorate, Tactical Evaluation, 1 August 1969, 20.

<sup>&</sup>lt;sup>73</sup> Message from Krulak to Westmoreland, 200339Z, 20 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

support delivered in that region, but whatever it's volume, this air support has proceeded without incident." According to Krulak, Momyer had executed over 1,000 sorties in support of the Army in I Corps since November 1967 with no issues or conflict with the nearly 8,000 sorties executed by the III MAW during the same time frame. Highlighting the over 3,500 sorties the Marines turned over to Seventh Air Force control after their own close air support requests were filled, Krulak explained even though the bulk were flown out of country, according to Momyer's wishes, nearly 100 of them supported Army units with no issues.<sup>74</sup>

Krulak understood Westmoreland's concern about the anticipated intensity of the battle to come. However, he did not feel it required any significant change to the air control arrangement. "So far as air support arrangements are concerned, past experience exhibits that you are well prepared," Krulak wrote. He used the air operations over Con Thien as his example, "712 SAC B-52 sorties, 699 7th Air Force sorties, 2,436 USMC sorties, and 71 USN sorties were all executed in the battle area, with good effect on the enemy and with minimal coordination difficulty on our part." Krulak felt the effort over Khe Sanh would likely be very similar and thus, he had already tested the concept over Con Thien. Plus, wrote Krulak, "the customer – the troops receiving the support – were abundantly content then, and it would appear imprudent now to alter a demonstrably effective system." 75

This portion of Krulak's reasoning illustrates the differences between Krulak's and Momyer's perspectives. Con Thien was an impressive operation, but Momyer saw it as air support of a specific objective. Momyer was worried about shifting airpower from multiple Con Thien scenarios and back again as the situation required. The two perspectives were often differentiated as producer and consumer oriented systems. Put simply, Krulak believed the final test was always the satisfaction of the man on the ground. As earlier detailed,

<sup>&</sup>lt;sup>74</sup> Message from Krulak to Westmoreland, 200339Z, 20 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

Message from Krulak to Westmoreland, 200339Z, 20 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

Momyer believed the consumer's satisfaction was important, but was only one of the criteria by which to judge a successful air support operation.

Of Westmoreland's concern for responsiveness, Krulak simply said the current system was already responsive enough. With specific reference to the system's capacity for rapid decision making, Krulak compared the Air Force and Marine systems. "I have no doubt that 7th AF support for Army units is immediate and responsive," he wrote, "all that is required is that the Army units go directly to the appropriate supporting 7th AF DASC's and state their needs in whatever form the support is required – preplanned, strip alert, or onstation." In the next step, Krulak explained, "these requests are funneled into the 7th AF TACC in Saigon where they are sorted out, and then passed down for execution." On the other hand, "the Marines go to their DASC's, ask for what they need, and the FMAW provides." Krulak believed Westmoreland was simply adding an additional level of approval to the Marine system and "this must degrade rather than improve the decision making process as it affects the critical ICTZ."<sup>76</sup>

In refuting Westmoreland's concern over the imprudence of restricting airpower to a specific geographic area, Krulak agreed, but only to make the point that the Marines were not guilty of this at all. "In 1967," he wrote, "fixed wing aircraft of the 1st MAW executed 79,532 combat/combat support sorties," and, "of this number 18,360 were flown for purposes other than support of the Marines, largely outside of ICTZ, and mainly under the direction of 7th Air Force in operations against North Vietnam and Laos." Krulak felt this 23% portion of the total Marine effort could have been allocated anywhere across South Vietnam. "That they were not," he wrote, "is simply a reflection of the operational flexibility with which MACV headquarters is endowed by your current procedures."

\_

<sup>&</sup>lt;sup>76</sup> Message from Krulak to Westmoreland, 200339Z, 20 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>77</sup> Message from Krulak to Westmoreland, 200339Z, 20 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

Krulak's final rebuttal for Westmoreland took him to task on every aspect of the airpower allotted to him. The standing regulations, Krulak wrote, "provide optimum authority for you to apportion your air assets to meet requirements." Krulak told Westmoreland the system was only limited by misunderstandings and the speed of the operating staff agencies. "Beyond the inherent flexibility which exists for massing or shifting your in-country air effort," Krulak explained, "there are broader procedures set down which afford COMUSMACV great latitude in directing and focusing the efforts of SAC B-52 resources," and, "procedures which provide for concentration of 7th Fleet air resources on RVN targets, if needed." Krulak did not envision an "increase in flexibility arising from removing control of the 1st MAW from its parent command."

Krulak ended his detailed message with a brief summary. "The changes which you are considering," he wrote, "would have the effect of degrading each of the critical areas of air/ground power application, decision making at the point and time of crisis, tactical flexibility and operational coordination." He had yet to couch his argument in terms of the integrity of the Marine air/ground team but could not hold back any longer. Krulak not only believed the proposed changes would diminish the effectiveness of the Marine team, but also felt, "it would do these things without any promise or prospect of benefit to the overall war effort." Krulak's final six sentences to Westmoreland were emotional, yet thoughtful:

In the Marine air/ground combat team you have a weapons system wherein the whole is of greater value than the sum of its individual parts. Additionally, you presently have a control system, derived from CINCPAC's basic directive and from our own responsive one, which embodies the optimum in flexibility, which has met crisis before, and which can meet adequately the crisis situation which faces you now. It provides for effective control, swift decision making and the means rapidly to concentrate your air resources at the point of climax. It has a record of success. It has not let us down. Now is no time to tamper with it.<sup>79</sup>

<sup>&</sup>lt;sup>78</sup> Message from Krulak to Westmoreland, 200339Z, 20 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>79</sup> Message from Krulak to Westmoreland, 200339Z, 20 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division

Almost ironically, as Westmoreland received Krulak's message, the first significant enemy actions of the siege took place at Khe Sanh. "Khe Sanh military installation has been under constant rocket and mortar fire since early morning, and Hill 861 has been under ground attack," Westmoreland wrote to Sharp. Momyer launched a C-130 ABCCC as well as a number of FACs in the area around the Marine outpost. Momyer also sent an Air Force liaison officer to Khe Sanh. With a good bit of military understatement, Westmoreland told Sharp, "The next several weeks are destined to be active." 80

These initial attacks destroyed the main ammunition dump at the base. Momyer's airlift control system identified six C-123s for 'tactical emergency' priority and loaded each with ammunition from Da Nang. Under fire from enemy artillery and poor weather, all six aircraft landed successfully at Khe Sanh and offloaded their cargo. It was not the first delivery at Khe Sanh under fire, but it characterized the heavy reliance on airlift resources over the course of the siege. For the next eight days, Air Force airlift averaged 250 tons per day. It was the only way to supply the base. Route 9 had been closed to road traffic since August 1967.81

With the onset of enemy operations near Khe Sanh, Westmoreland also informed Sharp he had sent Abrams north to oversee the operation. "I wanted General Abrams there with authority to give orders to, not only the Marines in my name, but to the Navy and to the Air Force," Westmoreland later recalled. "There were an awful lot of decisions that had to be made to put us into posture in order to control operations in that area and reaction to the enemy. It had nothing to do with my confidence in Cushman at all. It was strictly a practical

Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>80</sup> Message from Westmoreland to Sharp, MAC 00992, 21 January 1968, William C. Westmoreland Message File COMUSMACV, 1 Jan – 31 Jan 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>81</sup> Ray L. Bowers, *Tactical Airlift* (Office of Air Force History, United States Air Force, Washington, D.C., 1983), 297.

matter. If it had been an Army unit or Army corps up there instead of the III MAF, I'd have done the same thing, probably done it quicker."82

In his note to Sharp, Westmoreland addressed the single manager issue. "It has never been my intention to in any way interfere with the close air support so essential to the Marines on the ground or to upset the system at this critical time," he told Sharp. "On the other hand, I intend to do all possible to bring to bear in the most efficient and coordinated way all weapons that can support our fight during the important period at hand." However, Westmoreland 'urgently' requested the, "authority to delegate to my Deputy Commander for Air, the control that I deem appropriate over the air assets in my command."83

Taking the recent replies of Sharp, Krulak, and Cushman into consideration as well as his discussions with Momyer, Westmoreland decided on an interim arrangement for airpower. He assigned the 7th Air Force responsibility for the air support of the 1st Air Cavalry and the 23rd First Infantry Divisions currently deployed in I Corps. Momyer was to prepare to execute the second stage of Niagara and to concentrate all available airpower in the area of Khe Sanh. However, Westmoreland only continued coordination authority for Momyer and did not pursue operational control of the 1st MAW. As before, Momyer had execution authority for any excess sorties of the 1st MAW. In addition, Westmoreland wrote, Momyer had coordination authority for any diverted strikes from the north as well as B-52 sorties.<sup>84</sup> Although Westmoreland put all of these orders into an official message, he could just as easily have said all standing arrangements for air will continue.

Sharp was happy with Westmoreland's decision. "The preparatory actions which you have taken appear to have been timely and well advised," he wrote. Sharp reinforced Westmoreland's conviction of the importance of

<sup>&</sup>lt;sup>82</sup> Marine Corps Oral History, Interview of General William C. Westmoreland, April 4, 1983, Marine Corps Historical Center, Washington Navy Yard, Washington, D.C., p. 36-37, USMC History Division, Quantico.

<sup>&</sup>lt;sup>83</sup> Message from Westmoreland to Sharp, MAC 00992, 21 January 1968, William C. Westmoreland Message File COMUSMACV, 1 Jan – 31 Jan 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>84</sup> Message from Westmoreland to Sharp, MAC 00992, 21 January 1968, William C. Westmoreland Message File COMUSMACV, 1 Jan – 31 Jan 1968, William C. Westmoreland Papers, CMH.

airpower in the coming battle. "I interpret your proposed directive for the coordination of air support," Sharp told Westmoreland, "to be consistent with my established policies in this regard and I have no objection to its promulgation."85

Momyer detailed the outline of the plan for his staff. An ABCCC was to orbit over Laos and serve as an extension of the TACC. For the deconfliction of Marine artillery fire, the ABCCC was to communicate with the Marines at the Fire Support Coordination Center (FSCC) at Khe Sanh. Momyer wanted all roads leading in to Khe Sanh subjected to heavy interdiction efforts. Due to the size of the operation and the large commitment of air assets, Momyer also wanted an air defense patrol airborne to be prepared to defend the area against any attempts by the enemy to bring their air assets to the south. On January 22, Westmoreland ordered Momyer to execute Niagara II. On the first day of the operations, Momyer directed 595 tactical strike sorties and 49 B-52 sorties. Before the termination of the operations on March 31st, 24,400 tactical strike sorties and 2,500 B-52 sorties would be flown over the areas surrounding Khe Sanh.<sup>86</sup>

On the 23rd of January, Westmoreland updated Sharp on the progress of activities at Khe Sanh. Westmoreland fully expected the enemy to initiate simultaneous activities around South Vietnam, "in an attempt to divert and disperse our strength to levels incapable of country wide success." Westmoreland knew many would doubt the wisdom of holding Khe Sanh, but he 'unreservedly' believed it was "of significance; strategic, tactical, and most importantly, psychological." He felt the battle in I Corps could potentially be the decisive phase of the war. It is hard not to be struck by his premonition. "An initial setback must not be permitted to precipitate an erosion of our military and civilian determination that could be detrimental to the successful

<sup>&</sup>lt;sup>85</sup> Message from Sharp to Westmoreland, 211917Z, 21 January 1968, William C. Westmoreland Message File COMUSMACV, 1 Jan – 31 Jan 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>86</sup> Khe Sanh (Operation Niagara), 22 January – 31 March," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 1, 8.

accomplishment of our objectives in RVN."<sup>87</sup> Feeling the pressure, Westmoreland reportedly told Momyer, "Spike, Khe Sanh has become a symbol . . . it has become of great psychological importance to the United States... if I lose Khe Sanh I am going to hold the United States Air Force responsible."<sup>88</sup>

Answering the call, Momyer sent his operations and intelligence staff to the III MAF headquarters to further coordinate with the Marines. In the ensuing discussions, Cushman stressed he wanted all of the air support Momyer's organization could muster. Given a choice between air support and artillery, Cushman desired air support for its advantages in sheer firepower. Upon their departure, Momyer's representatives were "convinced that General Cushman was delighted that 7th Air Force had taken the initiative and was providing air power to assist his ground forces." 89

Soon after this meeting, the Marines published their guidelines for control and coordination at Khe Sanh. Their priority was, "to ensure that the ground commander can employ all supporting arms in his area of responsibility and that air support assets are most effectively utilized." To accomplish this objective, they divided the area around Khe Sanh into zones. Zone Alpha was the restricted area surrounding the base. Any air support in this area had to be coordinated and controlled by the Marine DASC at Khe Sanh and under positive control of a FAC, the Air Force MSQ at Dong Ha, or the Marine MSQ equivalent, a TPQ located on the field at Khe Sanh. Zone Bravo flights also had to be coordinated by the Marine DASC and required specific permission to enter. Strike aircraft could conduct strikes under their own recognizance provided they had clearance from the DASC. Zone Charlie covered all of the friendly occupied territory to the east of Khe Sanh and called for the same procedures as Zone Alpha. Zone Delta, the area north along the DMZ, and Zone Echo, the area to the south near Laos, were free fire zones under the control of the Seventh Air Force ABCCC. III MAF gave nearly exclusive strike responsibility to

<sup>&</sup>lt;sup>87</sup> Message from Westmoreland to Sharp, MAC 01060, 23 January 1968, William C. Westmoreland Message File COMUSMACV, 1 Jan – 31 Jan 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>88</sup> DTIC Technical Report, revised edition, U.S. Defense Logistics Agency - A Study of Strategic Lessons Learned in Vietnam. Volume VI: Conduct of the War, Book 1: Operational Analysis – Part 2 of 4: Chapter 3, May 9, 1980, 3–101.

<sup>&</sup>lt;sup>89</sup> Khe Sanh (Operation Niagara), 22 January – 31 March," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 9-11.

the 1st MAW for Zones Alpha and Bravo. Momyer viewed these independent air operations in a small area as a recipe for ineffectiveness, reminiscent of the penny-packeting of air power that had hobbled its effect in North Africa during World War II.90

Despite Momyer's skepticism of the coordination and control arrangements, he worked within the constraints to produce directives for his staff. "When the main thrust comes we will know it by the level of coordinated preparatory fire followed by assaulting enemy infantry," he wrote, and "all the air we have available will be shuttled night and day." The massing of enemy troops near Khe Sanh provided the kind of B-52 targets Momyer believed in. "Whenever it is possible," he told his staff, "we should mass the B-52s and then follow with the TAC air. This has always been sound and we shouldn't get away from it here."91 As evidence of his close working relationship with Westmoreland, Momyer prioritized close air support to troops in contact with enemy forces. "It doesn't matter where this is," he wrote, "these requirements will be met above all others." From his experience in North Africa, Momyer learned to conserve his efforts to avoid a loss of capability. His group had to leave the front lines in early 1943 and he could not afford the same with his forces now. "Since the battle in Khe Sanh may go for an extended time we must be in a posture to sustain our effort," he directed, so his subordinates should, "hold back our surge until I decide to make the all-out effort."92

While waiting for the enemy to commit fully at Khe Sanh, Momyer wanted to isolate the battlefield as much as possible from the source of supply. "Until the enemy commits himself at Khe Sanh," he wrote, "the level of effort should be balanced against the interdiction program in Laos. I want to keep this route interdicted night and day." With the large forces operating in and near Khe Sanh, a relatively large supply effort was required. According to the NVA history of the battle, "the movement of supplies was tremendous,

<sup>&</sup>lt;sup>90</sup> "Khe Sanh (Operation Niagara), 22 January – 31 March," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 78-79.

<sup>&</sup>lt;sup>91</sup> As quoted in Khe Sanh (Operation Niagara), 22 January – 31 March," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 22.

<sup>&</sup>lt;sup>92</sup> Khe Sanh (Operation Niagara), 22 January – 31 March," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 23.

<sup>&</sup>lt;sup>93</sup> Khe Sanh (Operation Niagara), 22 January – 31 March," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 23.

extending the vehicle roads to the Front using the part of the transportation forces to engage in road construction transforming Highway 9 into a supply line which went deep into the enemy area, creating depots that were moved forward and moving forward continuously while under enemy air and artillery fire."94

Amidst all of the activity in Khe Sanh, Westmoreland faced another decision on command and control arrangements. The proposed amphibious assault coordination continued. On the 27th, Westmoreland wrote, "My decision is that subsequent to the termination of the amphibious operation, Cdr 7th AF, in his capacity of MACV Air Force Component Commander will control air operations within the designated objective area and coordinate, as necessary, with commander responsible for airspace control in the surrounding areas to assure integration and coordination of supporting arms to ensure unity of effort in overall air operations."95 Once again, Momyer was able to make convincing arguments to Westmoreland on air control arrangements. The assault, considered numerous times, never took place. The decision, although along the lines of Momyer's desires, threw more fuel on the command and control fire slowly building to an inferno.

The next day, Westmoreland finally replied to Krulak's earlier message and concerns. Just as Krulak had done, Westmoreland sent the reply to Wheeler, McConnell, Chapman, and Sharp for information. Despite Westmoreland's later refutations of any knowledge of the provisions of MACV 95-4, the message read, "as reflected in MACV Directive 95-4, it has always been recognized that the exigencies of a critical situation may in my judgment require vesting overall responsibility for air operations in a plan of this nature and magnitude, in my DEPCOMUSMACV/AIR." Once again citing the situation in I Corps as a potentially decisive phase of the conflict, Westmoreland found it, "essential that centralized direction of the utilization of all air resources committed to this major action be planned, coordinated and executed by

<sup>&</sup>lt;sup>94</sup> "B5-T8 in 48 QXD, The Secret Official History of the North Vietnamese Army of the Siege at Khe Sanh, Vietnam, 1968," translated by Sedgwick D. Tourison, Jr., edited by Ray William Stubbe Wauwatosa, Wisconsin, 2006, 12.

<sup>&</sup>lt;sup>95</sup> Message from COMUSMACV to COMSEVENTHFLT, CG III MAF, CDR 7TH AF, 27 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

DEPCOMUSMACV/AIR, with the primary objective of providing III MAF maximum air support within the resources available to this entire command." In an effort to assuage Krulak's fears, Westmoreland assured Krulak, "that Marine Air will continue to support the Marine ground units in action."96

On the 30th, Momyer directed all of his units to maintain their present rate of sustainable sortie production. Momyer also ordered his units to be ready to surge to a higher sortie rate in case the enemy increased their offensive operations. Earlier that morning, Da Nang had been attacked in force by an orchestrated multi-battalion attack of VC units. Aided by mortar and rocket fire, the attack failed in its objective to overcome the facilities at Da Nang Airbase, I Corps Headquarters, and Marble Mountain. Although intelligence suggested an increase in enemy activity, Da Nang was the first attack of what became known as the Tet Offensive.<sup>97</sup> In response, Momyer directed Security Condition Red at all air bases in South Vietnam. In the early morning of January 31st, an estimated seven battalions of VC attacked Tan Son Nhut, the home of MACV and Seventh Air Force headquarters. The VC attempted to penetrate the base at each one of the base gates. Security forces held the attackers at bay until Army ground forces arrived on scene, forcing the VC back outside of the base perimeter. Meanwhile, gunships targeted the enemy reinforcements. Sniper, mortar, and small arms fire were heard throughout the day. In over 100 towns and cities across South Vietnam, American and ARVN forces fought the attacking VC back, dealing them a heavy blow.98

The attacks across the country stretched Momyer's forces to capacity. "If an attack at Khe Sanh/Camp Carroll does come tonight or tomorrow," he wrote on February 2, "I want to apply maximum effort as soon as the weather permits." With battles still raging in many cities across South Vietnam, Momyer addressed the potential of using the forces based in Thailand, normally reserved for North Vietnam and Laos. "We should not lose sight of the

<sup>96</sup> Message from Westmoreland to Krulak, 280801Z, 28 January 1968, William C. Westmoreland Message File, COMUSMACV, 1 Jan – 31 Jan 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>97</sup> Khe Sanh (Operation Niagara), 22 January – 31 March," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 25.

<sup>&</sup>lt;sup>98</sup> "Air Response to the Tet Offensive, 30 January – 29 February, 1968," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 13-15.

possibility the enemy may launch other concerted attacks at Pleiku, Kontum, Quang Tri City, Hue, and conceivably, DaNang," Momyer messaged, "in that case, we will use all out of country forces in SVN and thin out other requirements in the south." The seriousness of the situation in South Vietnam even had LBJ inquiring about the potential of using tactical nuclear weapons for the defense of Khe Sanh. 100

During the nights of February 3rd and 4th, the Dump Truck sensors and sonar buoys deployed around Khe Sanh reported heavy movements of enemy troops. In the mist enshrouded early morning of February 5th, Colonel David E. Lownds, the Marine Commanding Officer of the Khe Sanh Combat Base, used the trend information from these devices to halt what he believed was the enemy main attack. Extrapolating the enemy progress toward the base, Lownds ordered a B-52 strike. Since the B-52 took two hours to arrive, Lownds had to use an educated guess location for the strike. The strike arrived and, as Lownds recalled, "this was the only time that the kids on the line told me, the Marines on the line told me, that they actually saw bodies being thrown in the air . . . and I sincerely believe, and as I say I can't prove it, I sincerely believe that those strikes caught at least 2 battalions." <sup>101</sup>

With the enemy main attack now apparently in motion, Momyer's support of the besieged garrison gained daily interest from the JCS, the Secretary of Defense, and the President. In a message to Westmoreland, Wheeler wrote, "now that the attack has been launched the President is interested in all details . . . I request that you supply me by this channel each morning by 0700 hours EST a summary of the Khe Sanh/DMZ situation." The success of the B-52 strikes at Khe Sanh prompted Westmoreland to request

<sup>&</sup>lt;sup>99</sup> As quoted in "Khe Sanh (Operation Niagara), 22 January – 31 March," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 27.

 $<sup>^{100}</sup>$  Message from Wheeler to Sharp and Westmoreland, 011526Z, 01 February 1968, William C. Westmoreland Message Files, COMUSMACV, 1 Feb – 29 Feb 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>101</sup> Transcript of Tape 3139, Debrief of Col. D. E. Lownds, 015530, at Headquarters, FMFPAC, 29 July 1968, MHI, Quantico. Lownds did not recall the date, but the description coincides with material found in Eric Hammel, *Khe Sanh: Siege in the Clouds, An Oral History* (Crown Publishers, New York, 1989),178.

 <sup>&</sup>lt;sup>102</sup> Message from Wheeler to Westmoreland, JCS 01320, 05 February 1968, William C.
 Westmoreland Message Files, COMUSMACV, 1 Feb – 29 Feb 1968, William C.
 Westmoreland Papers, CMH.

more B-52s for Momyer's air effort. In a message to Sharp, Westmoreland wrote, "in view of heavy enemy concentration in the Khe Sanh / DMZ area and serious build-up in other critical areas, the daily requirement for B-52 sorties exceeds the current force availability of 40 sorties per day." Westmoreland wanted permission to use the contingency force of B-52s deployed to Kadena Air Base on Okinawa and Anderson Air Base on Guam, planes which had been sent to those locales in reaction to North Korea's seizure of the *USS Pueblo*. <sup>103</sup> Following the development closely, Momyer telephoned Westmoreland hours later as soon as he discovered the impending approval for the increase in B-52 strikes. <sup>104</sup>

With the increase in B-52 sorties, Momyer had more airpower at his call. The SAC ADVON staff, still embedded within Momyer's Seventh Air Force staff, did all the operational planning for the B-52 force with the MACV role isolated to target evaluation and selection. With an increasing demand for rapid response, SAC planners developed a new system to improve upon B-52 targeting capabilities. Code-named Bugle Note, the system overlaid the Khe Sanh area with preplanned grids. Each grid could be covered with the bombs of one three-ship formation of B-52s. Every hour and a half, a formation would arrive at a point to be directed by an MSQ-77 controller and directed to a particular grid box. The 105 total B-52s in theater, split between Anderson, Kadena, and most recently, U-Tapao in Thailand, alternated their launch times to provide 48 sorties per day over Khe Sanh using the Bugle Note procedures. Soon thereafter, the proximity restriction for B-52 attacks was reduced to one kilometer from friendly troops. 105 Marine Lance Corporal Charlie Thornton remembered these close in strikes well. "The ground would actually rumble under our bodies as we lay in a bunker while the bombs erupted around our perimeter," he recalled. "I am convinced that the bombing prevented a major

<sup>&</sup>lt;sup>103</sup> Message from Westmoreland to Sharp, 10 February 1968, William C. Westmoreland Message Files, COMUSMACV, 1 Feb – 29 Feb 1968, CMH.

<sup>&</sup>lt;sup>104</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 10 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>105</sup> Khe Sanh (Operation Niagara), 22 January – 31 March," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 68-70

troop confrontation at Khe Sanh and perhaps a major battle loss by the United States."<sup>106</sup>

Airlift was critical for Khe Sanh, and Momyer had to manage the risk to the airlift fleet to keep the lifeline to the base open. On the 12th of February, after NVA rockets disabled a C-130 on the field, Momyer chose to stop C-130 landing operations at Khe Sanh and rely completely on airdrop missions. Ten days later, Cushman followed suit for his force of KC-130 aircraft. 107 Although the airlift was critical, Momyer could not afford to accept heavy attrition in the C-130 force. Not only would it put airlift for Khe Sanh in jeopardy, but it would affect operations across the country. In addition, Momyer believed the airlift arrivals brought a great deal more enemy fire upon the base. 108 Other delivery methods did not require landing at the field. The Ground Proximity Extraction System (GPES) used hooks to engage cables on the ground and pull the cargo out of the open doors of a C-130 on low approach to the field. Instead of hooks, the Low Altitude Parachute Extraction System (LAPES) used parachutes to pull the cargo pallets out of the back of the aircraft at low altitude. In bad weather, Air Force airlift pilots discovered a method to drop supplies by Marine ground control approach (GCA) radar. 109 On one occasion, Momyer relayed to Westmoreland the result of a radar drop accomplished during weather conditions that precluded either LAPES or GPES. "30 yards off point via GCA method," Momyer told Westmoreland, "reassuring as they can get stuff in no matter the weather."110

With the continual increase in air operations over Khe Sanh, Momyer took a more aggressive stance on his coordination authority for the campaign.

The ABCCC, he told Cushman, was now responsible for the entire air effort. "In

<sup>&</sup>lt;sup>106</sup> As quoted in Eric Hammel, *Khe Sanh: Siege in the Clouds, An Oral History* (Crown Publishers, New York, 1989),152.

<sup>&</sup>lt;sup>107</sup> Jack Shumlinson, *U.S. Marines in Vietnam: The Defining Year, 1968* (History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C., 1997), 480. <sup>108</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 12 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>109</sup> Ray L. Bowers, *Tactical Airlift* (Office of Air Force History, United States Air Force, Washington, D.C., 1983), 302.

<sup>&</sup>lt;sup>110</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 16 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.

consideration of effective traffic control and mission accomplishment it is essential that efficient control be established and adhered to by its participants." Momyer directed, "all strike, FAC, support and airlift forces will contact ABCCC prior to entering the area of operations for confirmation of the primary mission and for hand off to the appropriate control agency." <sup>111</sup> Cushman did not take kindly to the change in procedures. Marine aviation assets, he responded "would continue their procedures until modified as a result of concurrence between CG III MAF and Cdr 7AF." <sup>112</sup>

On the 15th, Momyer phoned Westmoreland to inform him of the deteriorating relationship with the III MAF. Momyer was dismayed at what he perceived as a lack of cooperation. He was having no success with gathering information from the Marines or getting them to respond to his requests. Fearing the state of affairs was becoming unworkable, Momyer requested a meeting with Westmoreland to discuss the situation. Momyer believed he was going to have to ask Westmoreland every time he needed to issue a directive. He felt this denied Westmoreland of the true strength of his allocated airpower.<sup>113</sup>

On the 17th, in an attempt to work out an agreement, Momyer sent Blood to Da Nang to meet with Anderson. Anderson later remembered Blood held to the Seventh Air Force line: "Adequate coordination requires firm scheduling, firm targeting, and rigid control of airborne flights." Blood then relayed Momyer's wishes to Anderson. Momyer wanted "to establish now a control and coordination system which could handle all sorties that could be made available under emergency conditions." Anderson listened to Blood's messages, but no agreement resulted. 114

The stalemate further motivated Momyer to seek a decision from Westmoreland. Westmoreland asked Momyer to draft a message outlining his

<sup>&</sup>lt;sup>111</sup> "Khe Sanh (Operation Niagara), 22 January – 31 March," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 84.

<sup>&</sup>lt;sup>112</sup> As quoted in Khe Sanh (Operation Niagara), 22 January – 31 March," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 84.

<sup>&</sup>lt;sup>113</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 15 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>114</sup> As quoted in Jack Shumlinson, *U.S. Marines in Vietnam: The Defining Year, 1968* (History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C., 1997), 480.

own directives. Now, as he had many other times during Momyer's tenure, Westmoreland relied on his deputy for air to bring his expertise and experience to bear. Westmoreland intended to include Momyer's instructions in his letter to Sharp. The instructions, Westmoreland believed, would add a degree of clarity to his request for the assignment of single air manager duties to Momyer. As if to solidify Westmoreland's decision, the enemy attacked Tan Son Nhut, Bien Hoa, and Bien Thuy air bases with rockets only hours later. The well-coordinated attacks, all beginning at precisely 1:05 am, drove home the continuing seriousness of the situation in South Vietnam. He Marines, however, felt their system for air support was under siege. In a February 18th note to Krulak, Cushman wrote, "There is much and continuing trouble over the whole question of air control. Momyer attacks us at every opportunity." 117

The very next day, Westmoreland delivered the long awaited single manager message to Sharp. "The intensity of the war, contemplated new command arrangements in I Corps North, the deployment of two army divisions to that area, and the necessity of bringing to bear the maximum fire power on the enemy in support of both army and marine troops necessitates a new and objective look at the control of tactical air," he wrote. Westmoreland continued. The "problem is further complicated by the increase in B-52 strikes in I Corps north in addition to the large number of air force and navy strikes, and the complicated traffic control resulting from the heavy transport activity in the area." After extensive thought on the subject, not to mention numerous consultations with Momyer, Westmoreland told Sharp single management appeared to be the best path for the future. "In essence," he wrote, "it is essential that I look to one man to coordinate this air effort and bring this fire

<sup>&</sup>lt;sup>115</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 17 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>116</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 18 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>117</sup> Message from Cushman to Krulak, 180120Z, 18 February 1968, AIR CONTROL (SPECAT VOL 1), 01 February 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

power to bear on the enemy in the most effective way in line with my day-to-day guidance."118

Westmoreland wrote, "I have a four-star Air Force general, Momyer, as deputy commander for air who also commands the 7th Air Force. Obviously, he is the man for me to hold responsible for single management of this effort." Although Momyer had long felt the deputy commander for air not an ideal setup, the position now provided a pathway to single management. Westmoreland told Sharp he had already directed Momyer to develop the plan for single management, stressing it must, "provide for Marine aircraft to continue direct support to their deployed ground forces." 119

Westmoreland knew single management was far from a done deal and it was apparent by his careful and cautious address of the Marine contingent. Of his directions to Momyer, Westmoreland wrote, "I have instructed him to develop an arrangement that will preserve the Marine control system and maintain to the maximum extent the present modus operandi." Westmoreland followed these careful steps with a resolute call for action, "It is important that these arrangements be made soonest so that they will be fully operational when the battle in I Corps north reaches its maximum intensity." 120

On the 20th, Momyer travelled to Da Nang once again to confer with Cushman on the single management proposal. In a phone call to Westmoreland, Momyer presented his interpretation of the meeting's outcome. Although not evident from Cushman's message, Momyer said most of the trouble at the meeting came from Anderson, who was also in attendance. After a few volleys, Momyer told Westmoreland he had to tell the two Marines the single manager issue was a directive. It was not a question of whether it would

<sup>&</sup>lt;sup>118</sup> Message from Westmoreland to Sharp, MAC 02365, 19 February 1968, AIR CONTROL (SPECAT VOL 1), 01 February 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>119</sup> Message from Westmoreland to Sharp, MAC 02365, 19 February 1968, AIR CONTROL (SPECAT VOL 1), 01 February 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>120</sup> Message from Westmoreland to Sharp, MAC 02365, 19 February 1968, AIR CONTROL (SPECAT VOL 1), 01 February 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

be done, but how it would be done. In an attempt to drive home the importance of flexibility, Momyer told the two they had to consider and prepare for multiple and simultaneous Khe Sanhs. Momyer was optimistic in his outlook. He felt there were no hard feelings and believed, after hearing the full proposal, Cushman and Anderson did not think the system would be as bad as they originally thought.<sup>121</sup>

Despite this confidence, Momyer found it difficult to explain the theater control of airpower in a way that made sense to Cushman and Anderson. When Cushman expressed a concern his air assets were going to Seventh Air Force to be thrown in with Army requirements, Momyer explained that Cushman, in his role as an equivalent FFV commander, would submit requirements for his Marine and Army units to the MACV TASE. Westmoreland's commander's intent determined the allocation of air assets. Momyer's staff would control the air to support Westmoreland's approved requirements. When Cushman expressed his fear that he would not have enough sorties to support each Marine battalion, Momyer explained that only a theater agency could bring the firepower of Marine, Navy, Air Force, and B-52s to bear if there was a battalion requirement for it. Since Cushman now had other services under his command, Momyer once more described the MACV allocation process to ensure the accomplishment of Westmoreland's balanced theater objectives. 122 Momyer's sense told him Cushman had yet to grasp that the deployment of large number of forces into I Corps had changed significantly changed the requirements for air support. 123

Cushman's report to Westmoreland was less optimistic. For him, Momyer's brief raised several questions. Central to the Marine argument, and symptomatic of Westmoreland's careful approach, Cushman did not understand why additional levels of coordination were required if he was

<sup>&</sup>lt;sup>121</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 20 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>122</sup> Momyer Memorandum for Record, 22 February 1968, Supporting Document #18 in HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, "Project CHECO Report: Single Manager for Air in SVN," March 10, 1969.

<sup>&</sup>lt;sup>123</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 21 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.

guaranteed to get Marine aviation to support Marine actions. In a reflection of the Marine concept of airpower application, Cushman also believed the commander on the ground needed final approval for the best types of fire to employ – artillery, air, or naval gunfire. Since the Marines are a combined arms organization, Cushman argued, each battalion required a specific number of sorties. He felt Momyer's system not only diluted this capability but also failed to recognize the Marines used fixed wing assets in much the same way as the Army used their helicopter gunships. The Army was not losing their helicopter support, but the Marines were losing their equivalent.<sup>124</sup>

Cushman again used 95-4 as a rationale to keep the present system. In the firm belief the customer was always right, Cushman relayed in his interpretation of Momyer's brief, "I was unable to determine that there had been dissatisfaction on the part of the ground unit commanders with respect to the air support being provided in I Corps. Consequently, it is my opinion that there is no compelling reason for changing a system that is presently working well." 125

Cushman finished his note to Westmoreland with a surprising suggestion. "As your principal ground commander," he wrote, "I also possess considerable air assets, and in my opinion, the finest air control system existing in the world today. If you wish, I could assume the responsibility for control and coordination of the entire air effort in the I Corps Tactical Zone and be the single individual that you could hold responsible for the entire U.S. Military Effort in the I Corps Tactical Zone." Cushman said he was not actively pursuing this arrangement, but merely offering it as another option. 126

After receiving Westmoreland's message, Krulak also conveyed his thoughts to Cushman. Calling Westmoreland's message, "Momyer's latest trip

<sup>&</sup>lt;sup>124</sup> Message from Cushman to Westmoreland, 201416Z, 20 February 1968, AIR CONTROL (SPECAT VOL 1), 01 February 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>125</sup> Message from Cushman to Westmoreland, 201416Z, 20 February 1968, AIR CONTROL (SPECAT VOL 1), 01 February 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>126</sup> Message from Cushman to Westmoreland, 201416Z, 20 February 1968, AIR CONTROL (SPECAT VOL 1), 01 February 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

to the well," Krulak claimed Westmoreland has, "never been able to see what the air/ground team really is – Marine air and ground forces serving together under Marine operational command." In Krulak's opinion, Momyer and Westmoreland believed Marine aviation in support of Marine ground troops under Air Force control could fill the air/ground team formula. To Krulak, it was just not the same. The Marine commander was being robbed of his ability to direct the Marine air effort. Krulak believed Momyer and Westmoreland carefully selected the levers in their argument. Sharp would find it easy to approve a solution with references to the current crisis and a desire to maintain the status quo in most cases. 127

For his own argument for Sharp, Krulak planned four avenues of attack. First, Krulak believed Westmoreland already had a single manager. His name was Westmoreland. Second, under the current system, Krulak felt Momyer did not coordinate air at all. Instead, he believed Momyer's only function was to "bump what he states are his sortic capabilities against army division requirements, and then let the army fight out the allocations internally." Krulak saw no benefit for the Marines in that arrangement. Third, Krulak held there were no issues with coordination thus far. Finally, from Krulak's perspective, Momyer's control, "does not equal more coordination, but only degraded response at the most critical hour." 128

In a follow up letter to Cushman a short time later, written after receipt of his response to Westmoreland, Krulak addressed Cushman's argument. He was particularly impressed by Cushman's use of the degraded responsiveness argument. "Our experience in Korea, under an identical situation, was ghastly," Krulak wrote. "We had to have our requests in for pre-planned missions by noon the preceding day, and then did not find out whether our

<sup>&</sup>lt;sup>127</sup> Message from Krulak to Cushman, 202058Z, 20 February 1968, AIR CONTROL (SPECAT VOL 1), 01 February 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>128</sup> Message from Krulak to Cushman, 202058Z, 20 February 1968, AIR CONTROL (SPECAT VOL 1), 01 February 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

requests were to be honored until about 0400 on the morning we intended to employ them."129

Krulak was pleased with the rest of Cushman's message, save one point. Addressing Cushman's offer to assume the single manager role, Krulak wrote, "Our strength lies in fighting for the procedures which protect the air/ground team and its air support relationships," and, "any time we attempt to try our case in terms of exercising control on geographic or regional grounds, we get in trouble." 130

Westmoreland and Momyer did not take Cushman's offer seriously. In a phone conversation on the 21st, Momyer told Westmoreland he felt Anderson likely came up with the idea. After reading Cushman's response to the directive, Westmoreland wanted to use the word 'dedicate' when discussing the arrangements for Marine aviation. Momyer did not see an issue with this recommendation as he believed the word also characterized the support he provided the other two FFVs. The only situation which might prohibit Cushman getting all of the air support he requested, Momyer told Westmoreland, was if III MAF and the other two FFV's cumulatively asked for more air support than Momyer had under his control. In this case, Westmoreland's priorities would determine the allocation of airpower. 131

'Dedication' was a word Momyer typically used to describe a less than ideal setup for the control of airpower. As the single manager quest went on, Momyer became increasingly aware compromise was necessary to attain the goal. Momyer knew Westmoreland would not listen to doctrinaire arguments

The next morning, Westmoreland called Momyer to inform him he had prepared a message in response to Cushman. Chaisson, the Marine general who served as the Director of the MACV COC, assisted Westmoreland with the

<sup>&</sup>lt;sup>129</sup> Message from Krulak to Cushman, 210436Z, 21 February 1968, AIR CONTROL (SPECAT VOL 1), 01 February 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>130</sup> Message from Krulak to Cushman, 210436Z, 21 February 1968, AIR CONTROL (SPECAT VOL 1), 01 February 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>131</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 21 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.

note. According to Westmoreland, Chaisson feared Marine Corps enthusiasts in Washington might attempt to make a major issue out of the single manager proposal, especially along the lines of a roles and missions debate. Chaisson recommended Westmoreland emphasize that he has no interest in breaking up the Marine air-ground team. Westmoreland sent the message to Momyer to proofread and warned him to make sure there were no suggestions, overt or otherwise, that left anyone to believe the two had any intent to take over Marine Corps aviation. 132

The message to Cushman went out two hours later. "I appreciate your comments on the plan which General Momyer presented to you in response to my instructions," Westmoreland wrote, "I am confident that you understand that I am seeking a solution that will simplify and improve the procedures for providing air support to the troops under your command." Westmoreland acknowledged Cushman's concern over his lack of helicopter gunship equivalent support and suggested a dedication of Marine aviation assets to support Marines as much as possible could alleviate the concern. If Cushman had any issues with air support under the new arrangement, Westmoreland pledged to address it. "On the other hand," Westmoreland wrote, "I would expect that my Deputy for Air would have general direction of all routine matters relating to the procedures for requesting, fragging and controlling air support." 133

In the continuing interest of addressing all sources of concern, Westmoreland wrote Wheeler on the 24th. Providing evidence for Krulak's concern Westmoreland did not understand the air/ground team concept, Westmoreland told Wheeler it was difficult to understand how the Marines felt their team was being broken up since Marine aviation would continue to fly in support of Marines on the ground to the maximum extent possible. Momyer's influence was apparent throughout the message. The current problem, the

<sup>&</sup>lt;sup>132</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 22 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>133</sup> Message from Westmoreland to Cushman, 220427Z, 22 February 1968, AIR CONTROL (SPECAT VOL 1), 01 February 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

message read, "is one of coordination and directing all of these diversified air elements so that the air support can be put where and when needed in the required quantity." Further, "the old concept of a geographical area of responsibility breaks down by the sheer magnitude of the forces going into I Corps." Westmoreland equated all of the forces now under Cushman's control as a field Army equivalent. Just like any of his other FFV commanders, he expected Cushman to state his requirements for air support so Momyer could allocate his resources to meet the demand. In summary, Westmoreland reviewed his support for change. Taking Chaisson's recommendations, Westmoreland specifically addressed his intent to keep the Marine air/ground team intact as much as possible. Westmoreland believed he needed an integrated process and procedure for controlling and directing the air effort for the field army in I Corps. It would be up to Cushman to decide where to put the effort. In Westmoreland's view, the situation required a single person he could hold responsible for air support of the ground effort, and since it did not involve a change in doctrine or roles and missions, he was confident it was the best path for the warfighting effort. 134

In late February while final negotiations for the single manager arrangement continued, an Air Force Jolly Green helicopter arrived at Khe Sanh. Momyer, the Marines on the ground remembered, emerged from the helicopter dressed in a combat utility uniform, flak jacket, and a helmet. Colonel Lownds, the senior Marine on the ground in Khe Sanh, provided a briefing for Momyer in the Regimental Command Bunker. At the end of the brief, Lownds remembered Momyer said, "If you want a thousand sorties a day, I'll give them to you." For Lownds, Momyer's visit and his comment meant a great deal. The highest ranking Air Force officer in South Vietnam was willing to back the men at Khe Sanh. After Lownds' brief, Momyer asked to speak to the senior Marine aviator on the staff. Captain Richard Donaghy was the regimental air officer and the senior aviator in the 26th Marines regiment. In

<sup>&</sup>lt;sup>134</sup> Memorandum for Wheeler from Westmoreland, 24 February 1968, William C. Westmoreland Collection, Box 53, Folder 22, MHI.

<sup>&</sup>lt;sup>135</sup> Jack Shumlinson, *U.S. Marines in Vietnam: The Defining Year*, *1968* (History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C., 1997), 475n. <sup>136</sup> Transcript of Tape 3139, Debrief of Col. D. E. Lownds, 015530, at Headquarters, FMFPAC, 29 July 1968, MHI, Quantico.

the ensuing discussion, Momyer gave Donaghy the impression he wanted to help, but only on his own terms. Donaghy remembered Momyer told him he could send him more air than he could control, more than likely a plug for the efficacy of Air Force control of the surrounding airspace. In a bold move, Captain Donaghy told General Momyer that Air Force aircraft were carrying the wrong ordnance and dropping too high to hit the point targets. Donaghy wanted high drag weapons to permit the low altitude deliveries he believed were most effective. From Donaghy's recollection, Momyer smiled and told the Marine to get the high drag deliveries from Marine aviators, Momyer didn't want to lose planes down in the weeds so his pilots would continue as they had in the past. Although the two didn't see eye to eye at the time, the Marine aviator later commended Momyer for coming down to see where the action was. 137

This visit captured so much of Momyer in one setting. As a commander, Momyer believed being close to the action permitted a more complete realization of all relevant factors to the operation. As he stood on the field at Khe Sanh, Momyer undoubtedly had flashbacks of his own experience on an isolated stretch of land. For Momyer, the days on the beach at Salerno reinforced the power of air centrally controlled for maximum effect. There airpower significantly contributed to keeping the Axis from driving the Allied forces back into the Tyrrhenian Sea. Here at Khe Sanh, Momyer knew airpower could accomplish even more. Although Momyer did not always give the impression he was listening, he was always listening. Paying a visit to the Marines on the ground at Khe Sanh provided him with the perspective of his customer in Niagara. In an argument for control which often devolved into producer versus consumer arguments, Momyer had been on the ground with the Marines, and however brief a visit it was, he was there, with the warriors at Khe Sanh.

He acted on Donaghy's suggestions. On the 26th of February, shortly after his return from Khe Sanh, he provided guidance to the tactical units under his command. "All strike pilots and FACs will be briefed prior to flight on the criticality of the ground situation and the urgency of using every means to press home the attack," Momyer ordered. "Specifically, release altitudes for

<sup>&</sup>lt;sup>137</sup> Jack Shumlinson, *U.S. Marines in Vietnam: The Defining Year, 1968* (History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C., 1997), 475n, 486n.

dive deliveries must be reduced to minimums to improve accuracy in destroying pin point targets and effecting road interdictions." In continuing attempts to keep the battlefield isolated, Momyer directed his forces to proceed to road interdiction in the free fire areas near Laos. Momyer's visit to Khe Sanh reenergized his drive for success. "The urgency of immediate increased pressure on the enemy forces is of the highest priority," he concluded, "and every effort is directed to maximize the effectiveness of our air resources." <sup>138</sup>

Although airstrikes were critical, keeping the Marines supplied was even more critical. On the 26th, in a complimentary note not characteristic of the exchanges at the time, Cushman wrote to Momyer, "accuracy of drops has shown daily improvement, attesting to professional competence of air crews, GCA personnel and mission planners." The airlift goal was 235 tons per day. Marginal weather, enemy fire, the security of the drop zones, and maintenance and protection of the radar equipment were just a few of the challenges facing the air supply effort. To assist in negating the effects of enemy fire, Momyer directed fighter escort for transport aircraft to deliver smoke screens, napalm, and other ordnance during the deliveries. An Air Force airlift contingent on Khe Sanh coordinated the aerial deliveries.

With no response from Sharp on the single manager proposal, Westmoreland wrote again as a not-so-subtle reminder. "Your agreement is requested as soon as possible," Westmoreland wrote, "as I desire to reorganize on an urgent basis in order to be fully operational when the battle of I Corps North reaches its maximum intensity." Momyer offered Blood to Westmoreland as a spokesman for the concept. In turn, Westmoreland informed Sharp he was sending Blood immediately to discuss any questions on the concept with Sharp and his staff.<sup>141</sup>

The next day, Momyer called Westmoreland to tell him about the progress at Khe Sanh. In the ensuing conversation, Westmoreland informed

<sup>&</sup>lt;sup>138</sup> As quoted in Khe Sanh (Operation Niagara), 22 January – 31 March," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 58-59.

<sup>&</sup>lt;sup>139</sup> As quoted in Khe Sanh (Operation Niagara), 22 January – 31 March," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 76.

<sup>&</sup>lt;sup>140</sup> "Khe Sanh (Operation Niagara), 22 January – 31 March," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 76.

<sup>&</sup>lt;sup>141</sup> Memorandum for Sharp, from Westmoreland, 26 February 1968, William C. Westmoreland Unclassified 1967-1968, COMUSMACV Correspondence, CMH.

Momyer he was going to write another letter to Sharp to restate his position. Westmoreland was getting anxious. 142 The latest letter read, "In my opinion, Khe Sanh and the DMZ area are not receiving the most effective air support that the command is capable of providing." Westmoreland told Sharp he was becoming increasingly frustrated with the hassles erupting between Seventh Air Force and III MAF with every attempt to mass his airpower in I Corps. "As the responsible commander on the scene," Westmoreland wrote, "I cannot in all good conscience reconcile such procedures when time is frequently important." 143

Momyer and Westmoreland knew, despite their best efforts, the decision was likely to inspire a great deal of emotion from the perspective of roles and missions. "I hope we can avoid service heat from this professional exercise," wrote Westmoreland, "my efforts are motivated by nothing other than an attempt to bring to bear the maximum fire power on the enemy." In an attempt to alleviate any concerns he was acting as Momyer's mouthpiece, Westmoreland wrote, "this is not an Air Force maneuver designed to change roles and missions, the exercise is on my initiative as a joint commander." Westmoreland did, however, conclude the message with a caveat reflecting the influence of his air component commander: "I have observed at first hand Momyer's frustration in attempting to bring the maximum weight of air power against the enemy, particularly in reinforcement of the Marines." 144

On February 28, the Seventh Air Force director of operations, Major General Blood, personally presented the single manager plan to General Wheeler, Admiral Sharp, General Krulak, and other members of Sharp's staff. Blood delivered Momyer's words on the air situation in Khe Sanh. Citing the large number of sorties flown in the small airspace around Khe Sanh, Blood noted all service assets, "were separately scheduled into the area causing saturation and stacking of aircraft resulting in strike aircraft returning to base

<sup>&</sup>lt;sup>142</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 27 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>143</sup> Message from Westmoreland to Sharp, 271146Z, 27 February 1968, William C. Westmoreland Message Files, COMUSMACV, 1 Feb – 29 Feb 1968, CMH.

<sup>&</sup>lt;sup>144</sup> Message from Westmoreland to Sharp, 271146Z, 27 February 1968, William C. Westmoreland Message Files, COMUSMACV, 1 Feb – 29 Feb 1968, CMH.

with ordnance and failure of mission accomplishment by airlift aircraft." Further, Blood stated, "with the integrated and combined ground operations there was no apparent way geographically or otherwise to divide the effort so as to preclude overlapping or interference between 7th Air Force, 1 MAW and the added carrier effort all of which were independently scheduled into the same area." For these reasons alone, Blood told the audience, effective application of airpower required a single manager.<sup>145</sup>

Blood relayed Momyer's concern for not just the effectiveness of the participating forces, but also for their safety. The weight of the air effort simply could not be supported independently by III MAF assets. Likewise, the command and control system tailored to the III MAF aviation support structure was not capable of managing the total number of missions being flown into the area of concern. Blood detailed the capabilities of the 7AF TACS as an example of an organization that could handle the tempo of the operation. The daily management of sorties through one central location would not only allow an interface between operations and intelligence in the volume desired by Westmoreland, but also would permit cohesive targeting, response, and airspace control. 146

Krulak described the presentation in a memo to Cushman, "the air control brannigan began with a presentation by MGen Blood of 7th AF Headquarters. He illustrated with charts, and in the most dramatic way he could, the problems that are generated by the creation of the provisional corps, Vietnam with respect to air support." Krulak believed the main thrust of Blood's presentation was the intermingling of the Air Force and Marine air support systems required an organization responsible for directing both to achieve synchronicity. This would make it possible for Westmoreland to be able to move the focus of air effort as the situation dictated. 147

<sup>&</sup>lt;sup>145</sup> HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, "Project CHECO Report: Single Manager for Air in SVN," March 10, 1969, 12.

<sup>&</sup>lt;sup>146</sup> HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, "Project CHECO Report: Single Manager for Air in SVN," March 10, 1969, 13.

<sup>&</sup>lt;sup>147</sup> General Krulak to General Cushman, February 28, 1968, AIR CONTROL (SPECAT VOL 1), February 1, 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

The initial round of questions for Blood's presentation came primarily from Brigadier General Homer Hutchinson, a Marine aviator serving as Sharp's Assistant Chief of Staff for Operations. Hutchinson drove home a familiar argument with his questions. If Marine air was primarily going to be flown in support of Marines on the ground, there was not a good reason to submit requests through additional approval authorities only to have the support returned to the Marines in the field. After the conclusion of the question and answer period, Krulak offered his thoughts for the crowd. They were also familiar. Krulak stated the problem of two air control systems was academic and easily solved. The real issue, he believed, was, "operational control of the 1st Marine Air Wing, the 7th Air Force wants it, and we cannot give it up." He questioned the wisdom of removing the Marine organic fire support from Marine command at a critical time, especially when Army organic fire support did not fall under the same restrictions. 148

Always a master of the phrase, Krulak wrote, "the proposed system requires that CG, 1st MAW render operational fealty to two commanders; one for tactical air and one for helicopters and transports." Dual fealty, defined as the fidelity owed by a vassal to his feudal lord, was not one of Krulak's stronger arguments. There were multiple commanders in the theater who answered to more than one authority. Krulak also restated his belief Westmoreland already had all the authority he needed to direct airpower where he desired. His emergency authority provided him with the capability to turn over any number of 1st MAW sorties to Seventh Air Force for execution. This area was another where the two sides talked past each other. Believing the situation required it, Westmoreland was proposing to make his emergency authority the new standard operating procedure. According to Krulak, however, Sharp also did not understand Westmoreland's request. "I have to agree with Brute," Sharp commented during the discussion, "Westmoreland has the authority to do what he needs to do right now." 149

 <sup>&</sup>lt;sup>148</sup> General Krulak to General Cushman, February 28, 1968, AIR CONTROL (SPECAT VOL 1), February 1, 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
 <sup>149</sup> General Krulak to General Cushman, February 28, 1968, AIR CONTROL (SPECAT VOL 1), February 1, 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

After his general comments, Krulak asked Blood a series of questions designed to expose the weaknesses of the plan. The questions all brought up points Krulak had made on multiple occasions. After Krulak's questions, Wheeler spoke up in defense of Westmoreland and the responsibility he had as COMUSMACV. If Westmoreland wanted to direct his assets and lacked the ability to do so, Wheeler stated, something had to change. After Wheeler's comments, Sharp once again took the floor and agreed with Wheeler's premise that Westmoreland must have authority to employ his combat power the best way he saw fit but still did not see that Westmoreland did not already have that ability. Reflecting Krulak's influence, Sharp said he was, "not able to follow the need for submitting matters for decision to the Saigon level which, in the prosecution of the ground battle in I Corps, should be resolved by the commander on the ground." This statement was logically inconsistent as every FFV ground commander except I Corps submitted requests for air support to the 'Saigon level.'150

Sharp concluded the meeting by stating he, as the theater commander, also had responsibility for the situation in South Vietnam. Sharp believed he had already made a decision on single manager four times, but this time, after hearing Blood's proposal, Sharp ventured to levy a final verdict. At least, Sharp relayed, final at his level as he imagined his decision might be overridden in Washington. Krulak finished a discussion update note to Cushman with dry humor and an estimate of what was to come. "I expected to be telephoning from the jail tonight, but we are still at large. My guess is that Sharp is going to search for some sort of compromise. However, I sense that the Air Force is in concrete, and I doubt if Momyer will give at all." 151

The next morning, Momyer called Westmoreland to relay a phone conversation he had with Blood the night before. Blood did not feel Krulak's

 <sup>&</sup>lt;sup>150</sup> General Krulak to General Cushman, February 28, 1968, AIR CONTROL (SPECAT VOL 1), February 1, 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
 <sup>151</sup> General Krulak to General Cushman, February 28, 1968, AIR CONTROL (SPECAT VOL 1), February 1, 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

comments during the meeting were of any significance. 152 After more discussions in Hawaii during the day of the 29th, Blood again called Momyer to relay the day's events. In turn, Momyer called Westmoreland with the information. The Marines, Momyer relayed, were refusing cooperation based on an argument of a violation of roles and missions through the surrender of Marine operational control of Marine aviation. Momyer commiserated with Westmoreland that roles and missions have not changed since Korea. Although Momyer did not make the point, the one thing that had changed since the Korean conflict was the Defense Reorganization Act of 1958. In theory, Westmoreland's decision should have brought less controversy since Eisenhower intended to take the service secretaries out of the operational chain of command. Once again, Momyer used his study of 5th AF's control of Marine aviation in Korea to support his case. As precedent, it was valid, but as persuasion, it was dead on arrival. Momyer told Westmoreland he could remember a specific occasion where Krulak stated the Marines would never again repeat the Korea mistake. Because the Marine argument held Sharp was de facto removing their aviation arm, they believed the decision could not be made at Sharp's level but instead, required JCS approval. 153

In addition to the phone conversation, Momyer also wrote Blood a detailed message to further explain the MACV position and refute the assertions of the Marine critics. Throughout the message, Momyer wrote a simple word, 'we.' This indicated the unified stance of Westmoreland and Momyer. "A great deal of thought went into this proposal," Momyer wrote, "and it appears the proposal is being turned to an academic exercise inconsistent with the realities we face of fighting the enemy." Although they expected it, Westmoreland and Momyer were still dumbfounded by the use of roles and missions to dispute operational control of Marine aviation. Momyer listed other arrangements not in strict accordance with the roles and missions paper - an amphibious force (the III MAF) functioned as a Field Army in a sustained land campaign and the

<sup>&</sup>lt;sup>152</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 29 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>153</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 26 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.

USARV relinquished control of the Provisional Corps Vietnam to a Marine Force Commander. 154

On March 3rd, Sharp made known his decision via a message to Wheeler and Westmoreland with his component commanders, Ryan, Beach, Hyland, and Krulak, receiving copies for information. "In recognition of the necessity for maximum effective application of total air assets and for certain changes in light of the new ground force arrangements," Sharp wrote, "I have approved generally Westy's recommendations." Minus a number of minor modifications, including a request to be informed of any unhappiness on the part of the Marines, the single manager concept was ready to execute. 155

The next morning, Momyer called Westmoreland to inform him of the preparation in work for the implementation of the single manager directive. Momyer displayed a sense of inter-service sensitivity. Momyer's experience in doctrine and joint schooling at NWC provided foundations for these skills, but his experiences in Vietnam had driven home the importance of calculated actions. Momyer told Westmoreland he planned to ease the Marines into the new system so they did not feel like they were losing all of their air support. 156

On March 8th, Westmoreland issued the order making Momyer the single manager for control of tactical air resources in South Vietnam. <sup>157</sup> That night, Abrams called Westmoreland from Da Nang. He had spent his lunch hour with Cushman and Anderson. Each seemed to be feeling better about the new system implementation. Abrams told Westmoreland he did not have any second thoughts about the system but he was apprehensive about the potential interplay of personalities. He ventured a guess that Cushman was likely to test

<sup>&</sup>lt;sup>154</sup> Message from Momyer to Blood, 29 February 1968, Supporting Document #21 in HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, "Project CHECO Report: Single Manager for Air in SVN," March 10, 1969.

 <sup>&</sup>lt;sup>155</sup> Message from Sharp to Wheeler and Westmoreland, 030735Z, 03 March 1968,
 William C. Westmoreland Message File, COMUSMACV, 1 Mar – 31 Mar 1968, CMH.
 <sup>156</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 4 March 1968,
 William C. Westmoreland, COMUSMACV FONECONS, March 1968, William C.
 Westmoreland Papers, CMH.

 $<sup>^{157}</sup>$  Memorandum from Westmoreland to Momyer, 8 March 1968, William C. Westmoreland, #30 History Files, 1 – 31 March 1968, CMH.

the system with unreasonable demands and wondered, "how many axes Momyer has to grind."<sup>158</sup>

The next night, Westmoreland called Momyer to let him know there was already a press inquiry about the integration of air control. The dispatch alleged the Marines were up in arms over an Air Force scheme to take control of their organic air arm. The press corps was abuzz about the creation of an organization that was similar to one that did not work in the conflict in Korea. At first, Westmoreland told Momyer to be ready to hold a press conference in the morning. But an hour and twenty minutes later, Westmoreland changed his mind and decided Major General Kerwin should give the brief instead of Momyer. Westmoreland and Momyer, ever mindful of appearances and subtleties, thought a Kerwin announcement would promote a more neutral appearance than if Momyer appeared. In order to down play the decision even further, Kerwin was set to announce the establishment of the Provisional Corps first. Momyer's staff had only to provide the charts. Although many believed that the Air Force may have leaked the 'victory' to the press, General Cushman thought otherwise. "Spike is not that gauche. Stupid, he ain't."

The implementation of the single manager directive was not smooth. Although Cushman knew it was in effect, he did not get the actual message until March 9th. On the 10th, immediate requests and air control transferred to the single management system. The combination of the Marine and Air Force systems proved to be very difficult and even the appropriate location of the Joint DASC was in question. Critical Marine liaison personnel in the DASCs and TACC did not arrive until March 21. Preplanned missions under the system were not flown until March 22. One day later, the Commandant of the

<sup>&</sup>lt;sup>158</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 2 March 1968, William C. Westmoreland, COMUSMACV FONECONS, March 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>159</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 9 March 1968, William C. Westmoreland, COMUSMACV FONECONS, March 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>160</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 2 March 1968, William C. Westmoreland, COMUSMACV FONECONS, March 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>161</sup> Jack Schulimson, Leonard Blasiol, Charles R. Smith, and Capt. David A. Dawson. *U.S. Marines in Vietnam: 1968, the Defining Year* (Washington, DC: History and Museums Division, United States Marine Corps, 1997), 496.

Marine Corps requested the JCS advise Sharp to stop actions on single manager since the initiative was not in line with previous JCS decisions, violated the provisions of Unified Action Armed Forces, and had negative impacts on the basic roles and missions of the Marine Corps. No immediate judgment by the JCS meant the initiative could continue. All personnel involved in integrated Marine and Air Force operations began training on March 25.162

As the preparation for a full implementation of single manager reached the final stages, Momyer wrote to the Chief of Staff of the Air Force. McConnell and others were concerned about the doctrinal ramifications of the single manager for air since it was granted as a responsibility of the air deputy as opposed to the air component commander. McConnell worried it might provide an avenue to usurp the power of the air component in the future. This was especially worrisome if the deputy for air was not an Air Force officer. Momyer felt McConnell missed the point. In Momyer's opinion, the service should be proud. After almost three years of effort, the control arrangement in South Vietnam was close to what it had been in Korea. It was just not realistic, Momyer wrote, to think that the integration could have taken place at the component level. The Marines, who stated categorically they would never come under Air Force control again, and Westmoreland would only have considered integration possible at the theater level. 163

As was typical for Momyer, he did not hesitate to refer back to World War II to make his point with McConnell. "Tedder was Air Deputy for Eisenhower without his presuming to operate the components," Momyer explained to McConnell. To further assuage his fears, Momyer explained, "if we organize a theater properly, there should not be an Air Deputy in the first place . . . it is a superfluous position." Momyer continued to believe the position should be a full deputy. "Even if we should have Air Deputies in a theater of operation for the future, it is almost inconceivable to me it would be other than an Air Force

<sup>&</sup>lt;sup>162</sup> HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, "Project CHECO Report: Single Manager for Air in SVN," March 10, 1969, 35.

<sup>&</sup>lt;sup>163</sup> HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, "Project CHECO Report: Single Manager for Air in SVN," March 10, 1969, 13.

officer if there are major ground and air units," Momyer wrote.<sup>164</sup> Momyer could not have known then that the authority he had has a deputy for air very nearly replicated those Airmen generations later possessed as Joint Forces Air Component Commanders (JFACCs).

As March drew to a close, the enemy abandoned their pursuit of victory at Khe Sanh. American aircraft supported the last official sorties of Operation Niagara on March 31. Since January 22, the opening day of the effort, Momyer's aviators had flown 24,400 tactical sorties. The B-52s flew over 2,500 sorties. C-130s and C-123s completed 1,120 missions. Over 450 of these missions involved landings at the dangerous field. The airlifters delivered over 12,400 tons of precious supplies. Momyer not only orchestrated the aerial defense of Khe Sanh in what was called the "greatest sustained concentration of air power in the Vietnam conflict to date, "167 but he also pulled from his experience in World War II and many years of thought on the command and application of airpower to play a large role in denying the North Vietnamese a victory. On April 1, operations around Khe Sanh took on the name Operation Pegasus, the relief of the Marines by the clearing of Route 9.

"Khe Sanh was probably the turning point in the enemy's strategy for Tet," Momyer later wrote. He believed if "Khe Sanh had fallen, the regular NVA [North Vietnamese Army] troops would have moved against the major cities that were initially assaulted by VC [Viet Cong] local forces. The fact that there were no significant actions by regular forces indicated the enemy backed away from a combined military-political offensive." General Westmoreland also believed that "the key to our success at Khe Sanh was . . . principally aerial firepower." This was a belief held even outside the inner circles of MACV. On March 28th, Walt Rostow, LBJ's Special Assistant for National Security Affairs, wrote to President Johnson to inform him of Momyer's upcoming visit to

<sup>&</sup>lt;sup>164</sup> HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, "Project CHECO Report: Single Manager for Air in SVN," March 10, 1969, 13.

<sup>&</sup>lt;sup>165</sup> HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, "Project CHECO Report: Khe Sanh (Operation Niagara), 22 January–31 March," 1.

<sup>&</sup>lt;sup>166</sup> Ray L. Bowers, *Tactical Airlift* (Office of Air Force History, United States Air Force, Washington, D.C., 1983), 315.

<sup>&</sup>lt;sup>167</sup> HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, "Project CHECO Report: Khe Sanh (Operation Niagara), 22 January–31 March," 1.

<sup>&</sup>lt;sup>168</sup> Momyer, Airpower in Three Wars, 346–347.

<sup>&</sup>lt;sup>169</sup> Westmoreland as quoted in Schlight, *The War in South Vietnam*, 285.

Washington, D.C. In recommending that the president meet with Momyer, Rostow wrote simply, Momyer had "managed the defense of Khe Sanh by air power. You'd find him interesting." <sup>170</sup>

The ending of Operation Niagara was bittersweet. On March 31, 1968, LBJ appeared on television to speak those famous words, "I shall not seek, and I will not accept, the nomination of my party as your president." In the same speech, he halted bombing in North Vietnam except the area north of the DMZ. Although not specifically stated on television, the halt applied to any territory or targets north of the 20th parallel. This eliminated American air efforts in a portion of RP4, and all of the territory contained in RP5 and RP6A and B. Momyer later wrote, at the conclusion of the initial phase of the Tet Offensive, "the expected effect on the South Vietnamese people didn't materialize . . . and not a single province fell to the enemy." The battles, had by all accounts, resulted in an overwhelming defeat for communist forces in South Vietnam. However, the offensive had "succeeded in the effect that the North Vietnamese hoped to achieve on the U.S. home front." Momyer believed this loss of political will meant "instead of being able to follow-up the Tet offensive with a major military effort in South Vietnam and an all-out bombing campaign in the north, which would have been consistent with fundamental principles for applying military power, the President was compelled to suspend the bombing and step down as a candidate for reelection."171 Despite the tactical victories at Tet and Khe Sanh, the support of the American people and the Congress was exhausted.

LBJ's speech had special significance for Momyer. He was in the United States for a short visit and had an appointment with the President the next afternoon. In preparation for Momyer's visit to Oval Office, Walt Rostow, the man who recommended the meeting, wrote a brief note to the President outlining some topics of conversation. He suggested the President point out the reason for the bombing cessation. The decision was, wrote Rostow, "designed to maximize the chance of a negotiated peace and to unify the country, while

<sup>170</sup> W. W. Rostow to President Lyndon B. Johnson; Meeting with General Momyer, March 28, 1968, Folder 15, Box 03, Veteran Members of the 109th Quartermaster Company (Air Delivery) Collection, The Vietnam Center and Archive, Texas Tech University.

<sup>&</sup>lt;sup>171</sup> Momyer, Airpower in Three Wars, 350–357.

minimizing military disadvantages and giving our front line troops essential support." For discussion questions, Rostow suggested the President ask Momyer about the expected reaction of the aircrews to the cessation, the bombing effectiveness at Khe Sanh, his thoughts on rule changes to increase the effectiveness of the air campaign, the de-escalatory actions by Hanoi that could warrant complete cessation of bombing in the North Vietnam or Laos, a suggested response if Hanoi does not respond favorably to the cessation, and his thoughts on the LBJ's message to the men in Vietnam. Rostow's final recommendation, and undoubtedly Momyer's favorite, "you might ask him what all the fracas is about in control of Marine air in I Corps?" 172

At 6:37 PM on April 1, 1968, General William Momyer walked into the Oval Office to see the President of the United States. For forty-three minutes, the two war weary men exchanged thoughts on where the war had been and where it was headed. The meeting changed gears when LBJ had his secretary call his son-in-law, Pat Nugent, to come from his home fifteen minutes away to meet Momyer. Airman First Class Nugent, a National Guardsman, arrived at 7:20. He was on his way to a duty assignment in Vietnam and LBJ took the opportunity to introduce him to the senior Air Force officer in the theater. At 7:46, Momyer left the Oval Office, a world away, yet so tied to Vietnam.<sup>173</sup>

Before returning to the theater, Momyer attended the Air Force Association's (AFA) annual convention in Atlanta, Georgia. On April 5, Momyer accepted the General H.H. Arnold Trophy for "outstanding contribution to the Air Force and the nation in pursuing the air war in Southeast Asia." As the Arnold trophy winner, Momyer was the AFA's man of the year for 1967. His accomplishments in Vietnam during the year certainly deserved recognition. The trophy recognized the most outstanding contribution in the field of aerospace activity. Also accepting an award at the convention was Colonel

<sup>W. W. Rostow to President Lyndon B. Johnson; Meeting with General Momyer, April
1, 1968, Folder 15, Box 03, Veteran Members of the 109th Quartermaster Company (Air Delivery) Collection, The Vietnam Center and Archive, Texas Tech University.
Barry Kramer, "Pat Nugent Training for New Job in Vietnam," The Milwaukee Journal, August 13, 1968, p. 21; President's Daily Diary, April 1, 1968, LBJ Library, available from http://www.lbjlibrary.org/collections/daily-diary.html</sup> 

Robin Olds, one of Momyer's wing commanders and the master-mind behind Operation Bolo.<sup>174</sup>

Momyer returned to South Vietnam and a single manager system still in transition and turmoil. His staff was travelling throughout I Corps collecting data on the new system and finding ways to make it better. Not surprisingly, the Marines were not happy with the arrangement. They did not find the new system as responsive, preplanned requests took much longer than before, suboptimum munitions based on a high reliance on divert aircraft to meet immediate requests, and Marines were not getting as much air support. The debate stayed alive in South Vietnam when in mid-April, even after the Chief of Staff of the Army and the Chief of Naval Operations backed the Commandant in his call to stop the single manager enterprise, Wheeler sided with the Chief of Staff of the Air Force. The inability to agree required a judgment from the Secretary of Defense. Wheeler's recommendation was to take no action. In essence, Wheeler considered it "militarily unsound to dictate to responsible senior commanders of the level of COMUSMACV and his superior, CINCPAC, how to organize their forces and exercise command and control of them."

Concerned with the multitude of complaints about the new system, Westmoreland called Momyer on April 30th to discuss the path ahead. General Walt, the previous commander of the III MAF, had just completed a tour of South Vietnam and had a list of Marine complaints about the new system. Momyer met with Walt to hear each one. Some were misunderstandings, but many were substantive critiques of the new system. Momyer told Westmoreland he was going to travel north to see every division commander in I Corps, to let them know he was interested in their problems. Momyer closed the conversation with the words, "I'm jumping right on this." 177

<sup>&</sup>lt;sup>174</sup> "Sum of the People," Enid Oklahoma Chronicle-Telegram, April 2, 1968.

<sup>&</sup>lt;sup>175</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 30 April 1968, William C. Westmoreland, COMUSMACV FONECONS, April 1968, William C. Westmoreland Papers, CMH.

<sup>&</sup>lt;sup>176</sup> Memorandum for the Secretary of Defense, Subject: Operational Control of III MAF Aviation Assets, JCSM-237-68, 19 April 1968.

<sup>&</sup>lt;sup>177</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 30 April 1968, William C. Westmoreland, COMUSMACV FONECONS, April 1968, William C. Westmoreland Papers, CMH.

On May 2, Momyer presided over a conference to formally review the single management system. Momyer called all of the key individuals together to determine the flaws in the system and how to correct them. In his notes of the meeting, Anderson wrote, "I would have thought the intent was to review the 30 days to determine whether or not we should continue with single management." Momyer addressed the critiques of the system, element by element. He agreed the preplanned sortie request process needed improvement. On the continued criticism of the lack of armed helicopters in the Marine inventory, Momyer decided to specifically delineate Marine fixed wing sorties in the operations orders each day to act as helicopter equivalents. In some areas, Momyer explained the conceptual foundations of the new system. The 3rd Marine Division, under operational control of Army General William Rosson's PROVN Corps, was not getting as much air support as before the change. Rosson, present at the meeting, explained that of his attached three divisions, the 3rd Marine division was not the main effort and was receiving only 25% of his air requests. "The tenor of this discussion," Anderson wrote in his notes, "led me to believe that the Air Force knows it is in some trouble on single management and is willing to modify the system in major respects if necessary to keep the system in force."178

Westmoreland called a meeting on May 8 with his key commanders to discuss the progress of the initiative. In the morning before the meeting, he called Momyer to ask him a few last minute questions. Undoubtedly a little daunted by all of the criticism levied upon the structure, Westmoreland asked Momyer if all of this would be simpler under the old divided system. Without hesitation, Momyer responded, "No, more complicated. They could do it with only two Marine divisions up there, but not with the additional forces in the area." 179 At the meeting, Momyer addressed all concerns and briefed a modified

<sup>&</sup>lt;sup>178</sup> Major General Norman J. Anderson, Oral History Transcript, Benis M. Frank, Interviewer, History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C., 1983, 2223-24.

<sup>&</sup>lt;sup>179</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 8 May 1968, William C. Westmoreland, COMUSMACV FONECONS, May1968, William C. Westmoreland Papers, CMH.

preplanned request system.<sup>180</sup> The Marines had good reason to be upset. The time lapse between a battalion request to weapons on target was now averaging 36 to 50 hours. The new system sought to shorten the timeline significantly. Approximately 70 percent of sorties allocated for preplanned sorties would now be distributed one week in advance to the FFV/MAF commanders. The allocations were based upon Westmoreland's weekly priorities. The remaining 30 percent available for daily sorties provided Westmoreland and Momyer the ability to shift a significant force in the appropriate area while keeping consistent support for on-going operations. Although the modified preplanned system did not go into effect until the end of May, Momyer's change was the saving grace of the single manager program.<sup>181</sup>

Many saw this change as a defeat for the Air Force. Airpower was now allocated to ground commanders with little to no ability for Momyer to impact its use. However, the modification was another example of Momyer's ability to adapt to the situation at hand and to help the ground commander succeed by his own measures of merit. Momyer later wrote, "the change in allocation of sorties was brought about by the fact that most of the contacts between friendly and enemy ground forces was a result of the initiative of the enemy and not us." He continued, "since the ground commander was mostly responding to the enemy initiatives, he wanted a stream of aircraft coming into his area on a regular basis that would give him assurance of having something available if the enemy should attack." This was the Marine model of close air support. 182

Momyer found this use of air to be inefficient but applicable to the situation. He cautioned, "in a war where there are large scale actions demanding a major portion of the effort be concentrated, the tactical Air Force would be frittered away if we tried to give every division so many sorties a day." 183 Momyer knew this was not the war of large scale actions. Even in this

180 Message from Westmoreland to Wheeler, MAC 6348, 15 May 1968, William C. Westmoreland Collection, Box 24, Folder 3, MHI.

<sup>&</sup>lt;sup>181</sup> HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, "Project CHECO Report: Single Manager for Air in SVN," March 10, 1969, 46-56

<sup>&</sup>lt;sup>182</sup> Momyer Comments on In-Country Air Strike Operations, Southeast Asia, 1 January 1965 – 31 March 1968, Corona Harvest, p. 10, 168.7041-120, AFHRA.

<sup>&</sup>lt;sup>183</sup> Momyer Comments on In-Country Air Strike Operations, Southeast Asia, 1 January 1965 – 31 March 1968, Corona Harvest, p. 10, 168.7041-120, AFHRA.

late stage of his career, Momyer was capable of adjusting his frame of reference built from conflicts past to meet the reality of the present day.

Years later, Anderson praised Momyer's flexibility. "The Seventh Air Force was capable of adjusting and very anxious to make improvements in the system," he stated. "They became very, very willing to adjust in accordance with any criticism that we might have, which had the effect of taking the rug right out from under us."184 Cushman believed, "the final agreement was satisfactory in Vietnam at that time and place."185 Major General William Van Ryzin, Cushman's Deputy Commander during most of the single manager debate said, "There is something significant about this single management of air, and something good came out of it. Between the Army and the Air Force, right now, they are a lot closer to the Marine Corps' way of doing close air support." Van Ryzin believed, "for the first time, the Army got close air support, they know what it is." Other accounts back the Army's happiness with the changes made in the system after single management took effect. "From the U.S. standpoint, the single management program is beneficial to the defense of the United States," Van Ryzin concluded, "and I think, as a result of what we have learned in Vietnam, we can come to . . . an agreement with the Air Force of what is going to happen in the future."186

General McCutcheon saw single management as a loss for Momyer and the Air Force. Since the adaptation to the earlier system applied not only for the Marines but also across all of South Vietnam, "the real winner in the whole problem was the Army because they began to get more and better air support than they had previously." McCutcheon also believed it was a defeat for Momyer because, "COMUSMACV himself began to play a larger role in the whole problem and he and the MACV staff would direct Seventh Air Force what proportion of sorties would be flown in country and out of country for any

<sup>&</sup>lt;sup>184</sup> Major General Norman J. Anderson, Oral History Transcript, Benis M. Frank, Interviewer, History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C., 1983, 201.

<sup>&</sup>lt;sup>185</sup> Oral History Transcript, General Robert E. Cushman, Jr., U.S. Marine Corps (Retired), Benis M. Frank Interviewer, History and Museums Division, Headquarters, U.S. Marine Coprs, Washington, D.C., 1984, 71.

<sup>&</sup>lt;sup>186</sup> Special Vietnam Oral History Project, Transcript of Recorded 'Brainstorming' Session, 20 April 1971, with General Davis, Lieutenant General Buse, Van Ryzin, and Wieseman, Major General Simpson, Colonel Caldwell, and Messrs. Shaw and Frank.

particular period of time." <sup>187</sup> Momyer did not see better support for the Army as a loss. In the realm of tactical airpower application in South Vietnam, better support for the soldier on the ground was a win. Although it was easy for the soldier or the Marine to think the Airman did not have the best interest of the man on the ground in mind but only the agendas of the air leaders, it was not the case. Embedded in Momyer's sometimes doctrinaire ways was a firm commitment to apply airpower to best enable the accomplishment of Westmoreland's objectives in South Vietnam.

A few days after the meeting in Saigon, Westmoreland received news from Wheeler. Paul Nitze, the Deputy Secretary of Defense, had upheld the single manager directive despite the objections of the Army, Navy, and Marine Corps. In his judgment he wrote, "I am in agreement with the views expressed by the Chairman, Joint Chiefs of Staff... that the Unified Combat Commander on the scene should be presumed to be the best judge of how the combat forces assigned to him are to be organized, commanded and deployed to meet the threat facing him." In his report, Nitze specifically praised the process changes in preplanned sorties to alleviate Marine Corps concerns. Wheeler had received the changes from Westmoreland just in time to submit them to Nitze for his evaluation. "I must say," Wheeler concluded, "that this cable was most timely and helpful." 188

One of the first real tests of the single manager concept was the Battle of Kham Duc. The isolated special forces camp was located approximately 100 miles south of Khe Sanh and ten miles from the Laotian border. On May 10th, with indications an NVA Division had surrounded the base, Westmoreland sent an infantry battalion and an artillery battery of the Americal Division to reinforce the base. Ten C-130s airlifted over 600 men and their equipment into the airfield at the camp. In the early morning of the 11th, the field and camp came under mortar attack. By the evening of the 11th, Westmoreland made the decision to evacuate the camp. Gunships provided support through the night,

<sup>&</sup>lt;sup>187</sup> Marine Corps Oral History, Interview of Lieutenant General Keith B. McCutcheon, USMC, 22 April 1971, p. 7, MCHI, Quantico, Virginia.

<sup>&</sup>lt;sup>188</sup> Message from Wheeler to Sharp and Westmoreland, JCS 05378, 17 May 1968, William C. Westmoreland Collection, Box 9, Folder 4, MHI.

but the enemy did not wait. In the early morning on the 12th, the NVA division began an orchestrated rocket, mortar, and ground attack on the outpost. 189

Westmoreland ordered Momyer to evacuate and provide maximum air support on the morning of the 12th. Momyer put all preplanned sorties on hold to make the maximum amount of sorties available for the effort at Kham Duc. Six B-52s targeted the enemy positions in the surrounding hills. An ABCCC was airborne and controlling airstrikes by 9:20 am. Fighters stacked up over the field and the ABCCC handed them off to the FACs in turn as fighter after fighter targeted enemy positions. The first C-130 landed at the field at 10 am. It was the first of six C-130 landings for the day. The first C-123 landed at 11:05 and was off again at 11:08 with 65 evacuees aboard. In the confusion of the day, the TACP and the airlift ground control team personnel evacuated the base. In an ironic bit of luck, one of the FACs sustained aircraft battle damage, landed at the field, and upon finding no TACP in place, called the DASC for guidance. Momyer ordered him to stay in place as the liaison for all airpower to the forces on the ground.<sup>190</sup>

As a C-130 orbited the field waiting to land at 4:00, the crew watched a C-130 crash in a large fireball shortly after takeoff. No one survived the crash. Soon after, another C-130 crash-landed and slid off the runway, and two Army helicopters were shot down. Throughout the airlift effort, ten to eighteen strike sorties per hour flew FAC directed airstrikes around the perimeter of the camp. The coordination efforts permitted helicopter and airlift evacuation operations while aircraft attacked both sides of the runway. The day was extremely costly in resources and personnel, but by dusk, 1,400 personnel had been successfully evacuated. The senior Army commander on the ground at Kham Duc said later, "every single target that we detected was struck immediately with a combination of bombs, napalm, and strafing runs . . . the aircraft flew on the deck; they were on the target, and there is little doubt in my mind that, had they not been there, we would still be wandering out in the woods there trying

<sup>&</sup>lt;sup>189</sup> "Kham Duc," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 8 July 1968.

<sup>&</sup>lt;sup>190</sup> "Kham Duc," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 8 July 1968.

to get back here."<sup>191</sup> After hearing the outpost was clear, Westmoreland called Momyer. "Congratulations on the way you responded to this," he said, "it was a magnificent job. Single manager for air may have problems, but I feel secure when I can call on one man to do the whole job for me, arranging everything." Momyer responded simply, "That's the advantage of the system."<sup>192</sup>

The quest for single management in South Vietnam displayed Momyer at his worst and his best. At his worst, Momyer was doctrinaire and unthinking in his application of the lessons of the wars past. He also had a tendency for stubbornness and obstinacy. He wore down others with his unflinching adherence to the ideas established from years of action, thought, and study. However, it was these same qualities Momyer would display when he was at his best. He stuck to his principles. He was steadfast in his beliefs and worked tirelessly and endlessly to create reality out of concepts and doctrine. As a senior subordinate in a joint command, Momyer was adept and influential. He not only had the ear of the joint commander, but also his faith, trust, and confidence. The relationship between Momyer and Westmoreland was nurtured by proximity, position, and power. By proximity, most of Cushman's conversations with Westmoreland were by message. Most of Momyer's were face to face. By position, Momyer was a deputy commander. Westmoreland saw him as an advisor on the employment of airpower, not purely as a component commander. By power, excepting Abrams, Momyer was the only other four star general in Westmoreland's command. It was an added benefit, just bestowed in December of 1967, bringing Momyer a higher degree of supremacy in an often rank-centric environment.

As he left Vietnam, Momyer handed the reins of Seventh Air Force to General George Brown, a future Air Force Chief of Staff, Chairman of the Joint Chiefs, and the same officer who recommended Momyer receive a fourth star. The recommendation paid dividends for Brown as well. He pinned on his fourth star on the way to Vietnam. Momyer left Southeast Asia for Langley Air Force Base and command of the organization that was his home for most of his Air

<sup>191</sup> "Kham Duc," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 8 July 1968.

<sup>&</sup>lt;sup>192</sup> Record of COMUSMACV FONECON, Westmoreland and Momyer, 12 May 1968, William C. Westmoreland, COMUSMACV FONECONS, May1968, William C. Westmoreland Papers, CMH.

Force career, Tactical Air Command. As Momyer's command drew to a close, Secretary of the Air Force Harold Brown described him as a man who, "knows more about the air war in Southeast Asia than any man on earth, and this belief together with a high regard for him is shared by General Wheeler, General McConnell, General Westmoreland and General Abrams." Despite this praise, Momyer was not leaving triumphantly. The air war against the north had ended without resolution, the country and the Congress had lost faith in its warriors, and Momyer, once again, felt the burden of a commander who made decisions for which many good men paid the ultimate price in service to their country. He was proud of these men; their bravery, their service, and their sacrifice. He was also proud of the ones who returned home to their families and friends; those who lived to fight another day. But, he was deeply saddened by the lack of a victory to show for the cost to the nation and its warriors.

As the operational command for airpower in Vietnam, Momyer faced a command arrangement that often neutered his ability to further the progress of the war. He desired a theater airpower organization, where he, as the operational Airman, worked for Westmoreland as the joint force commander overseeing the entire conflict in Vietnam. This was far from what he had. Where he had the most authority, as Westmoreland's Airman, he made the most impact. Whether it was making organizational changes or restructuring processes to meet his vision for the application of airpower, his leadership helped defeat the enemy's near term strategy for victory in the South. He effectively applied airpower where it could have the greatest effects, when the enemy sought force on force conflicts in pursuit of decisive defeats. Where Westmoreland sought conflict with an elusive enemy, Momyer had an obligation to provide operational and tactical success through the air. He met that obligation time and time again. Although he had no direct say in the overall strategy of the conduct of the ground campaign in South Vietnam or the political objectives sought in the conflict, his application of airpower provided an opportunity for both to succeed.

<sup>&</sup>lt;sup>193</sup> Memo to Secretary McNamara From Harold Brown: Air War In Southeast Asia, March 21, 1968, Folder 05, Box 11, Larry Berman Collection (Presidential Archives Research), The Vietnam Center and Archive, Texas Tech University.

In North Vietnam, where Momyer envisioned a theater air campaign in support of the ground campaign in the South, the application of airpower was blunted by the command and control arrangements put in place by military leaders as much as it was by the constraints put in place by civil authority. Again, as an operational commander, Momyer pushed for change but also ultimately understood he must operate to the best of his ability within that environment. He listened to his commanders, drove tactics improvements, and focused on efforts to most effectively strike the targets provided. He saw air superiority not as an end in itself, but as varying levels of effort to balance risk with gain and costs with benefits. He fought valiantly to protect and employ his force in the most efficient manner possible while his force fought valiantly to attack their targets.

Maybe most remarkable of Momyer's Vietnam story is the influence and respect he had as an Airman. As the theater Airman, Momyer was positioned well by the Air Force for advocating the best way to contribute to success on the ground through the air. Through equal or greater rank of his fellow senior leaders in country, by proximity to the MACV commander, and the boldness of his beliefs, Momyer's influence was concrete. His ability to articulate airpower's impact and the importance of organizational optimization to support that impact, brought a level of respect from both military and political leaders that few Airmen had previously attained. His senior leader peers did not always agree with Momyer, but each knew he was a force to be reckoned with. His assignment as the Commander of TAC recognized his position as the top tactical Airman in the United States Air Force.

Momyer's part in Rolling Thunder, popularly known as the least successful air campaign in history, would forever hobble his legacy. Had the application of steadily increasing pressure against North Vietnam actually caused Hanoi to cease its aggression in South Vietnam, Momyer's role as the top combat Airman in Vietnam would have earned him a higher spot in the pyramid of combat airpower leaders. It was not to be. Instead, the Tet offensive and the virtual abandonment of the air campaign in the North signaled the beginning of the end of the conflict. It was to be a long end, to be sure, but Momyer's departure coincided with the loss of confidence in the fate of the

conflict. It would not be for three and a half years before the true impact of airpower's contribution in Vietnam would come to light.

## Chapter 14

## The End and the Beginning

Momyer returned from Vietnam to command TAC for a little more than five years before retiring from the Air Force in September 1973. While at TAC, Momyer remained intimately involved in the conflict in Vietnam, as a large majority of TAC's assets and aircrews continued to operate in Southeast Asia. He not only provided and trained the forces for the fight there, but also prepared to fight a possible conflict on the plains of Europe. During his time at TAC, Momyer furthered his reputation as the Air Force's expert on tactical airpower. As his active duty career drew to a close, he found a new beginning as a senior advisor to the Air Force, a role that birthed Momyer's book, *Airpower in Three Wars*. While Momyer's efforts in Vietnam did not lead to victory, the foundations of change he established during that tour were solidified and furthered at TAC and as a senior advisor in the first years of his retirement from active duty.

On August 1, 1968, Momyer assumed command of TAC from General Gabriel P. Disosway, who remarked to the impressive crowd that had gathered for the occasion, "there is no one more equipped for the TAC Command. General Momyer has long been associated with tactical air. He knows the business from A to Z." Almost ten years to the day the Momyer's last moved into a house on Benedict Avenue, Pat and the General were now residents of the house in the center of the street. Now in their third tour on the TAC staff, the Momyer's knew the home of the TAC Commander well and had attended many parties and social functions at the home. The house was as it always had been, but so different all the same for it was now Momyer's home.

Momyer's assessment of the TAC commander's responsibilities offered an overview of the job. "Overall, the TAC commander is assigned three major responsibilities, each of which dictates an important change in operational relationships," Momyer wrote in a proposed chapter for an Air War College text. "These mission responsibilities are: commander of TAC; commander in chief of the US Air Force component of the unified Atlantic Command; and the

<sup>&</sup>lt;sup>1</sup> Virginia Biggins, "Disosway Retires, Momyer Takes Over TAC," *Newport News Daily Press and Times-Herald*, supporting document in 4500th Air Base Wing History, K-WG-4500-HI, Jul-Dec 1968, IRIS No. 0461643, AFHRA.

commander in chief of the Air Force component of the unified Strike Command." At the time, Atlantic Command was responsible for warfighting tasks in the Caribbean area. Strike Command was responsible for "contingencies in the Middle East, Southern Asia, and Africa south of the Sahara Desert area." Momyer was also responsible for deploying "forces overseas for employment by other unified commands," as well as conducting "joint exercises in the continental United States."

Shortly after assuming the responsibilities of the TAC commander, events underscored for Momyer Vietnam would not be his only challenge. In August, Soviet forces quickly overran Czechoslovakia. The Soviets had, "completely modernized their forces" and the invasion, "stunned NATO observers because they didn't think the Russians could do that." Before the surprise, the standard NATO defense plan for Europe had been a replay of World War II, where Western forces would have ample time to mount an invasion of the continent. The Soviet invasion of Czechoslovakia changed all that. Of particular concern for Momyer and TAC, the Senate Subcommittee on Preparedness believed, "the lag (behind the Soviet Union) in U.S. tactical hardware development jeopardized" American air superiority heading into the 1970s.<sup>3</sup>

Momyer set out to correct this situation directly. "When I took over TAC," he later remembered, "we got started on the fighter modernization program with the introduction of the F-15 and with the translation of the research and development of the A-10 into a production aircraft. We got the AWACS justification finally established on the basis of tactical need rather than the air-defense need, based on our experience in Vietnam." Uniquely, and in a way that would impact the success of the United States Air Force for years to come, Momyer turned from a belief in multi-purpose aircraft to a new belief in the importance of specialized aircraft. Momyer believed the potential intensity

<sup>&</sup>lt;sup>2</sup> "Tactical Air Operations: Proposed Article by General Momyer for AWC Chapter on General Purpose Forces," June 1970, p. 4, 168.7041-29, from General Momyer Papers, AFHRA.

<sup>&</sup>lt;sup>3</sup> TAC History, Jul 1968 - Jul 1969, vol. 1, p. ii, K417.01, IRIS No. 898106, AFHRA.

<sup>&</sup>lt;sup>4</sup> As quoted in *George S. Brown, General, U. S. Air Force: Destined for Stars* (Novato, Calif.: Presidio Press, 1983), 250.

of a conflict in Central Europe called, "for a large number of airframes and tended to emphasize specialization." 5

Momyer had also come to see the tactical air control system as one of the most important aspects of the application of airpower. Momyer believed a centralized system represented the best method for the employment of tactical air forces. "I think it is clear," Momyer wrote, "that the counter air, interdiction, and close air support missions are demanding of a very sophisticated command and control system, one that is fully responsive to the tactical situation. The flexibility of our tactical air forces is derived from this little understood command and control system. . . . In my experience, it takes longer to develop and articulate the command and control system than any other element of our tactical air forces." Although the command and control system was critical to the success of tactical airpower, Momyer noted that "when the wave of economy rushes in, it is the first thing to be pruned. It happened after World War II and Korea. Surely, we have learned our lesson and won't make the same mistake again."

As the commander of TAC, Momyer had formal responsibility in, "developing, testing, and projecting future tactical air requirements." General John C. Giraudo, one of Momyer's previous wing commanders from Vietnam and then serving as the Air Force Director for Legislative Liaison, considered Momyer's spokesman capabilities essential to the Air Force's budget and procurement efforts on Capitol Hill. Giraudo believed the Air Force "should raise the horsepower of our Air Force witnesses before Congressional investigating committees and subcommittees. Program Directors and Air Staff experts are fine, but when the game gets into the final quarter I want to bring in the first team. For instance, I intend to get General Momyer before the SASC Tactical Air Power Subcommittee." Chaired by Howard W. Cannon, the committee's purpose was to investigate the ramifications of the three services

<sup>&</sup>lt;sup>5</sup> As quoted in Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force, 1961-1984* (Air University Press, Maxwell AFB, Alabama, 1989), 492.

<sup>&</sup>lt;sup>6</sup> General William W. Momyer, Commander, TAC to General John P. McConnell, Chief of Staff, Letter, 13 November 1968, 168.7041-10, from General Momyer Papers, AFHRA. <sup>7</sup> "Tactical Air Operations," 2.

<sup>&</sup>lt;sup>8</sup> Major General John C. Giraudo Oral History, by Lieutenant Colonel Charles M. Heltsley, 8-12 January 1985, p. 427, K239.0512-1630, IRIS No. 1105191, AFHRA.

proposed close air support platforms; the Marine Corps Harrier, the Army Cheyenne attack helicopter, and the Air Force A-X, later to become the A-10. The debate was about roles and missions as much as it was about hardware.<sup>9</sup>

"Like most of our senior officers," Giraudo remembered, after asking Momyer to be the Air Force's key witness, "Momyer wasn't exactly enthusiastic about testifying before Congress . . . but Momyer couldn't deny that he was 'Mr. Tactical Air' to everyone who followed air power and that only he could make the necessary positive, credible case for the A-10." In recalling Momyer's testimony, Giraudo remarked simply, "It was magnificent," largely because Momyer was ". . . the one man who had fought for tactical air from WWII to Vietnam and was an undisputed leader and scholar in this entire discipline." Giraudo felt that "it was a superb performance by a fully prepared senior expert who had the personal experience and background in the exact matter at hand to be believed without a doubt." Certainly not solely as a direct result of Momyer's testimony, but also not despite it, the A-10 was fully approved and funded. 10

Giraudo's characterization of Momyer's testimony was accurate. For two hours and fifty minutes, Momyer captured the Air Force's position on close air support, the historical aspects of the role of air in support of ground troops, and the technical and tactical aspects of both the close air support mission and the aircraft under consideration for funding. Later, an article appearing in the *International Defense Review* extracted portions of Momyer's testimony to produce what the editor of the journal called, "the best summary of the US Air Force's position on Close Air Support available today." Addressing some of the well-advertised complaints from ground forces, Momyer noted the real measure of responsiveness was, "the ability to meet the enemy situation with the decisive amount of firepower when and where required." Momyer told the committee responsiveness was "normally used to mean a short response time," but it was

<sup>&</sup>lt;sup>9</sup> General William W. Momyer, Commander, TAC, testimony to U.S. Congress, Senate, Committee on Armed Services, Close Air Support: Hearings before the Special Subcommittee on *Close Air Support of the Preparedness Investigating Subcommittee*, 92nd Cong., 1st sess., October, November 1971, 1.

<sup>&</sup>lt;sup>10</sup> Giraudo Oral History, 446.

<sup>&</sup>lt;sup>11</sup> General W. W. Momyer, USAF (ret.), "Close Air Support in the USAF," *International Defense Review* 1/1974, 77.

"of no value if the system does not have the capability required to destroy or neutralize the target when it gets there." Further, "a key to effective close air support is flexibility; and a key to flexibility is centralized control, the capability to concentrate whatever force is required to neutralize or destroy the enemy threat whenever and wherever the threat endangers the ground forces." It was classic Momyer and reflected one of the many facets of his all-encompassing view of theater airpower.

While Momyer faced the Soviet challenge and the parallel force modernization efforts, he maintained a reputation as an expert on the war efforts in Vietnam. In October of 1968, the President summoned Momyer to the White House to hear his advice. Since March of 1968, Johnson had restricted bombing north of the 20th parallel in Vietnam. Now, he explored the idea of restricting bombing in all of North Vietnam. The President believed the restriction could further a new lead in the peace talks with the enemy. When the President called for Momyer to come to Washington, D.C. to discuss the topic, General Abrams, the Joint Chiefs, the Ambassador to South Vietnam, and key civilian advisors had already offered their thoughts on the idea, but the President wanted Momyer's professional judgment before making his decision.

On October 23, 1968 at 2:44 p.m., Momyer walked into the Cabinet Room of the White House for a meeting with the President and his Special Assistant for National Security Affairs, W. W. Rostow. The President, reassuring Momyer he did not intend to put him in a position to override the advice of his superiors, laid out the decision he faced. The President sought Momyer's personal opinion on whether or not the potential benefits of the pursuit of the opening for peace talks outweighed the potential costs of a bombing halt throughout North Vietnam.<sup>13</sup>

Momyer outlined his view of the relevant factors. Momyer told the President the start of the monsoon in North Vietnam meant American forces had to bomb targets there using radar. Since trucks were now the main targets of the campaign, radar bombing was relatively ineffective. Likewise, since the

-

<sup>&</sup>lt;sup>12</sup> Close Air Support Hearings, 173-181.

<sup>&</sup>lt;sup>13</sup> Memorandum for the Record, Notes from Meeting with the President, Washington, October 23, 1968, Document 110, in Foreign Relations of the United States, 1964-1968 Volume VII, Vietnam, September 1968 – January 1969, available from <a href="http://history.state.gov/historicaldocuments/frus1964-68v07/d110">http://history.state.gov/historicaldocuments/frus1964-68v07/d110</a>.

onset of the monsoon season in North Vietnam meant Laos usually experienced fair weather, the campaign against the trucks could continue there, minimizing the risk of the halt on the efforts in South Vietnam and the threat to the troops in I Corps. 14 "If you were President," Johnson asked Momyer, "would you do it?" After a brief pause, Momyer answered, "Yes, sir." Momyer told the President he believed accepting the minimal military risk of a bombing halt in North Vietnam justified the chance to bring the conflict to an end. 15

Almost immediately after the short meeting, the President called another meeting with his key foreign policy advisers, including General Wheeler and Secretary of Defense Clifford. After Johnson provided a copy of the proposed text of the bombing halt declaration for all to read, Secretary Clifford spoke. "You have firm military support." The President replied, "General Momyer said you couldn't do much because of weather. If we get what we are asking for, he'll support it." General Wheeler, seemingly surprised the President would quote Momyer's support as his first justification, responded, "The Chiefs said that the other day." 16

Over the next few days, as the President wrestled with the costs and benefits of the cessation of air attacks in the north, he used the meeting with Momyer to justify a pause in the bombing. In a phone conversation with Senator Richard Russell, the powerful Chairman of the Senate Committee on Armed Services and a long time Johnson mentor, the President relayed, "I got in Momyer yesterday, and he said he definitely recommended it; that he thought it would be much more useful." Johnson continued, "He didn't want to say this publicly, but that he ran the bombers for a long time and that they need them more in Laos and South Vietnam than they do in North Vietnam." Johnson told

-

http://history.state.gov/historical documents/frus 1964-68 v 07/d 111.

Vietnam, September 1968 - January 1969, available from

 <sup>&</sup>lt;sup>14</sup> Memorandum for the Record, Notes from Meeting with the President, Washington, October 23, 1968, Document 110, in Foreign Relations of the United States, 1964-1968 Volume VII, Vietnam, September 1968 – January 1969, available from http://history.state.gov/historicaldocuments/frus1964-68v07/d110.
 <sup>15</sup> Memorandum for the Record, Notes from Meeting with the President, Washington, October 23, 1968, Document 110, in Foreign Relations of the United States, 1964-1968 Volume VII, Vietnam, September 1968 – January 1969, available from http://history.state.gov/historicaldocuments/frus1964-68v07/d110.
 <sup>16</sup> Notes on Meeting with Foreign Policy Advisers, Washington, October 23, 1968, Document 111, in Foreign Relations of the United States, 1964-1968 Volume VII,

Russel that Momyer believed the halt was "an acceptable risk. Your destruction can be more effective in Laos with the weather such as it is and in South Vietnam than it can in North Vietnam." Johnson also told Russell that Momyer had told him, "We can't get in there [North Vietnam] over 2 days a month beginning now and lasting at least 90 days and maybe 120."<sup>17</sup>

Johnson held a conference call the day he announced the bombing halt to the American public, informing the three 1968 presidential candidates, Humphrey, Nixon, and Wallace, of the pending announcement. Johnson hoped to get all three candidates to support the bombing halt, so as "to let one man speak with a single voice to the Communist world." Johnson told the presidential candidates the military leaders of the nation were consulted and were behind him. "I even went down and got General Momyer who had been in charge of all our Air Force there for several years and who had just been brought in from Thailand to Langley Field, and had him in alone, and I didn't tell him what anybody else recommended and he not only recommended, but he urged it."18

Momyer characterized his involvement in the bombing halt decision slightly different than did Johnson. As he wrote in his book, Momyer and the Joint Chiefs "assured the President that the North Vietnamese would take advantage of the bombing halt to improve their position for a future offensive." Momyer remembered they also told the President, "It would be unrealistic to suppose that Airpower could control the enemy's flow of supplies into South Vietnam by striking the LOCs in Laos if all the alternative routes in North Vietnam were immune to attack." On one point, Momyer's memory and the presidential records coincided. "Each of us advised that if the President were convinced that the North Vietnamese sincerely wanted substantive negotiations," Momyer wrote, "he might try a brief bombing halt without unduly

-

<sup>&</sup>lt;sup>17</sup> Telephone Conversation Between President Johnson and Senator Richard Russell, Washington, October 26, 1968, Document 125, in Foreign Relations of the United States, 1964-1968 Volume VII, Vietnam, September 1968 – January 1969, available from http://history.state.gov/historicaldocuments/frus1964-68v07/d125.

<sup>&</sup>lt;sup>18</sup> Transcript of Telephone Conversation Among President Johnson, Vice President Humphrey, Richard Nixon, and George Wallace, October 31, 1968, Document 166, in Foreign Relations of the United States, 1964-1968 Volume VII, Vietnam, September 1968 – January 1969, available from

http://history.state.gov/historicaldocuments/frus1964-68v07/d166.

jeopardizing our forces in South Vietnam." However, in the event the North Vietnamese did not show an interest in the negotiations, "then the bombing campaign should be resumed against all military targets through North Vietnam, and such a campaign should continue with no let-up until our demands for a cease-fire were satisfied."<sup>19</sup>

In many ways, the divergent recollections of the two men are not surprising. As the man looking to justify a decision, Johnson heard what he wanted to hear. Through each successive telling of the story, Momyer's advice morphed into clear cut agreement with the President's chosen path. As the man providing advice, Momyer recalled what he intended to say as a senior military leader, but maybe not what his audience heard when the President of the United States asked Momyer to stand in his shoes.

On October 31, 1968 at 8 p.m., Johnson announced in a nationally televised speech the bombing of North Vietnam would stop in exactly 12 hours to provide an impetus for peace talks in Paris. Johnson recorded in his diary that it was the most important decision he had ever made. For this most important decision, he specifically requested Momyer's advice through informal channels. The TAC commander did not warrant a say in the decision, but Momyer did. When faced with the weight of the President's stakes, Momyer backed a bombing halt. Although Momyer's recollection of the events reflected professional filters, it is clear his even and logical approach to the President's challenges made an impression on the commander in chief.

During his five year tour as the commander of TAC, Momyer had many opportunities to reflect upon his tour in Vietnam and the fate of America's military efforts. In October 1970, Momyer told an Air Force officer at the National War College writing a thesis on limited war that political constraints had precluded military success in Vietnam:

I disagree with the type of limitations we imposed upon our military forces as a result of the political objectives. In my judgment our political objective should have been to destroy and neutralize the will of the North Vietnamese to wage war so that we could impose our terms for the cessation of hostilities. If we had established this objective, our military forces would have been given flexible strategic direction that would have been conducive to

<sup>&</sup>lt;sup>19</sup> Airpower in Three Wars, 33.

defeating the enemy's military forces and the means to continue the war. 20

In his frustration, Momyer shifted his argument for the optimum application of airpower from a campaign focused against the will of the enemy, to the ability of North Vietnam to pursue the conflict in the south. Momyer believed the freedom to conduct an unrestricted theater campaign could have resulted in victory:

For example, the entire target system in North Vietnam would have been released for attack at one time with the only restraint being the ability to go after those targets. With this freedom of operation, our air power would have been turned loose to hit any target in North Vietnam that supported and sustained their will and ability to fight. We would have been permitted to hit the governmental apparatus, the ports, the food supply, the military depots, the dykes, the blockade of their coast and all of the numerous targets that were available. With such an unrestricted target system, the military objective, primarily air power, would have been to paralyze the entire capacity of the country to function as a nation with the consequent loss of control and detailed defeat of the forces deployed in Laos, Cambodia, and South Vietnam. 21

Momyer's response was both expected and surprising. His experience in World War II and the study of the application of airpower since told him an unrestricted air campaign would equal the defeat of even the most determined enemy. What was surprising, however, was that he did not address the differences that set Vietnam apart from the other wars he had studied and fought. Throughout his time in Vietnam, he, more than most, seemed to grasp and was able to explain the challenges of fighting an enemy who had a high tolerance for pain and required very little to support the war efforts in the south.

Momyer later presented a more nuanced point of view. "The political objectives must be consistent with the capabilities of the forces," Momyer wrote. "If there had been a more valid evaluation of our political objectives in Vietnam,

<sup>&</sup>lt;sup>20</sup> General William W. Momyer, Commander, TAC to Lieutenant Colonel J. D. Moore, The National War College, Letter, 17 October 1970, 168.7041-33, IRIS No. 1001145, from General Momyer Papers, AFHRA.

<sup>&</sup>lt;sup>21</sup> General William W. Momyer, Commander, TAC to Lieutenant Colonel J. D. Moore, The National War College, Letter, 17 October 1970, 168.7041-33, IRIS No. 1001145, from General Momyer Papers, AFHRA.

I believe it would have revealed our military forces couldn't produce the conditions dictated by the specifics of the objectives. Thus, there would have been a change in the political objectives or a decision not to commit forces with a consequent loss of the country."<sup>22</sup> Almost unknowingly, Momyer was agreeing with the JASON group who had written that no amount of bombing could produce the desired result in Vietnam. Momyer understood military force served political objectives. His concern was that those who established those objectives did not think about how the military could or could not attain them. His assessment is among the earliest clear expressions about the war in Vietnam. There is little evidence, however, that Momyer ever forthrightly relayed this belief to his political masters. His political superiors may not have accepted his assessment, but there was none better equipped to provide the perspective.

Momyer further developed this idea in a 1971 letter to the Editor of *Aerospace Historian* magazine. "Personally," Momyer wrote, "I have serious doubts as to whether military capabilities were sufficiently evaluated in a determination of the political policy to pursue. I am inclined to believe the political policy was established and then the military were asked what were their capabilities to support the policy." In comparison to World War II, Momyer believed, "we failed in Vietnam to achieve a balance between political and military objectives." Momyer, the letter read, "would be inclined to say the political policy was incompatible with the capabilities of the military forces to satisfy the terms of that policy." Although President Nixon's policy of Vietnamization was in full force in 1971, there were still over 150,000 military personnel in Southeast Asia, fighting and dying. In one sense Momyer's attitude was defeatist, but in another it was candor and realism from a combat leader who bore the weight of the death of many warriors on his shoulders.

Although he believed the political objectives and military capabilities were mismatched, Momyer attacked his responsibility for training and

-

<sup>&</sup>lt;sup>22</sup> General William W. Momyer, Commander, TAC to Lieutenant Colonel J. D. Moore, The National War College, Letter, 17 October 1970, 168.7041-33, IRIS No. 1001145, from General Momyer Papers, AFHRA.

<sup>&</sup>lt;sup>23</sup> General William W. Momyer, Commander, TAC to Dr. Robin Higham, Editor, *Aerospace Historian*, Letter, 27 November 1971, 168.7041-46, IRIS No. 1001158, from General Momyer Papers, AFHRA.

equipping the force in Vietnam with vigor. He faced many challenges in this arena. Instead of rotating veteran fighter pilots through Southeast Asia, the Air Force policy stated 'everybody goes once before anybody goes twice.' This rule was also known as the 'one pilot – one tour' policy. "If everybody goes once before anybody goes twice," General Robert J. Dixon, Momyer's successor at TAC later remembered, "you do a lot of cross training because there are not enough fighter pilots."<sup>24</sup> According to Air Force Historian C.R. Anderegg, in order to train all of these pilots, all but two of TAC's fighter bases had to focus on the replacement training unit mission. Since this training focused on getting pilots just proficient enough to employ the aircraft in combat, fighter pilots of the command spent very little time in realistic combat training.<sup>25</sup>

Later, reflecting back on the Air Force's policy, Momyer wrote, "Even though the overall objective of getting all able bodied pilots into the war was exemplary, the lesson indicates that it was not the most effective way of doing the job." It was not a choice he made or supported. Momyer believed the combat effectiveness of the force in Vietnam and the force at home would have remained more effective if crew members served indefinite tours and cross training was kept at an absolute minimum. The "dictates of the war," he believed, "should dictate the utilization of experienced personnel and the time in combat." <sup>26</sup>

Despite these challenges, Momyer set an environment that enabled his subordinates to look for new and innovative ways to train aircrews for the air superiority mission. The opportunity emerged from gradual decreasing training requirements to fill cockpits in Southeast Asia over Momyer's time in command. At the end of 1968, there were 36 tactical fighter, bomber, or attack squadrons in Thailand and South Vietnam with 647 aircraft. By October of 1972 the number was almost half the 1968 total with 11 squadrons and 385 aircraft.<sup>27</sup> As the training requirements to fill cockpits slowly decreased, Momyer's

-

 <sup>&</sup>lt;sup>24</sup> General Robert J. Dixon Oral History, by Captain Mark C. Cleary, 18-19 July 1984,
 p. 196, K239.0512-1591, IRIS No. 1105139, AFHRA.

<sup>&</sup>lt;sup>25</sup> C.R. Anderegg, *Sierra Hotel: Flying Air Force Fighters in the Decade After Vietnam* (Washington, D.C.: Air Force History and Museums Program, 2001), 76.

General (ret) William W. Momyer Memorandum for General Ellis, Subject: Corona Harvest (USAF Personnel Activities in Support of Operations in Southeast Asia, 1 January 1965 – 31 March 1968), 168.7041-129, IRIS No. 1028247, AFHRA.

<sup>&</sup>lt;sup>27</sup> John T. Correll, "The Vietnam War Almanac," AIR FORCE Magazine, September 2004.

leadership of TAC resulted in nearly twenty separate actions to improve the air-to-air capability of the force.

Momyer's actions were partially motivated by the steadily increasing activity in the air over North Vietnam. At the end of 1971, President Nixon, convinced the North Vietnamese were preparing for an offensive, authorized strikes as far north as the 20th parallel, only 75 miles south of Hanoi. This was the first return to these areas of North Vietnam since 1968. In late March of 1972, the North Vietnamese prosecuted a conventional invasion of the south. Known as the Easter Offensive, the enemy activity evoked a response from American airpower. The increased enemy activity called for more aircraft and Momyer, now the force provider, delivered. TAC supplied the majority of the nearly 200 F-4s that deployed to Southeast Asia in response to the offensive.<sup>28</sup>

Although the majority of the training improvements occurred too late to affect the war in Vietnam, they paid dividends for years to come. Momyer authorized continued funding for the Red Baron reports, an in-depth study of air-to-air engagements from the war in Vietnam that served as a study aid for combat aircrews and highlighted the important influence of training and experience in air combat engagements. A TAC Tactics Bulletin and SEA Tactics and Review Brochure also went into circulation to improve tactics development and dissemination. Under advice from fighter pilots at the Tactical Fighter Symposium, Momyer designated the Tactical Fighter Weapons Center at Nellis AFB as the center of excellence for the development and validation of new and improved tactics.<sup>29</sup>

It was, however, the changes in realistic training supported and authorized by Momyer that had the longest term impact for the Air Force. In May of 1972, as their comrades in arms fought in air-to-air battles in Operation Linebacker over North Vietnam, the instructors and students of TAC's Fighter Weapons School fought mock air-to-air battles over the Nevada desert in a fight with 32 aircraft, the role of the MIGs played by A-4s from Miramar Naval Air Station. Participants lauded the effectiveness of the training and the Weapons

<sup>&</sup>lt;sup>28</sup> Wayne Thompson, *To Hanoi and Back: The United States Air Force and North Vietnam,* 1966-1973 (Smithsonian, Institution Press, 2000), 203-223.

<sup>&</sup>lt;sup>29</sup> "History of the Tactical Air Command, 1 July 1972 – 30 June 1973" Office of TAC History, Headquarters Tactical Air Command, Langely Air Force Base, Virginia, 229-236, ACC History Office.

School leadership decided to include the training in all future courses.<sup>30</sup> During a visit to Nellis, Momyer received a briefing on another idea for a training program from the Tactical Fighter Weapons Center commander, Major General William Chairsell. Chairsell lauded the idea of a full time aggressor squadron of dissimilar aircraft. A small group of pilots at Nellis was pushing the concept, and much as he had done at other times in his career, Momyer trusted the instincts of his subordinates.<sup>31</sup> On October 15, 1972, Momyer's signature established the 64th Fighter Weapon Squadron as the Air Force's first aggressor squadron. Stationed at Nellis Air Force Base and first equipped with T-38s, the Aggressor squadron would provide TAC with a solution for realistic, dissimilar air-to-air training for years to come.<sup>32</sup>

While waiting for the Aggressor squadron to rise to full capability, Momyer instituted two other specialized air-to-air training programs. The first, called Top Off, put a select group of new F-4 pilots and weapons systems officers through a 16 day flying and academic course at Nellis. The course of instruction focused upon the "most advanced aerial combat knowledge and techniques available." The second program, called Rivet Haste, followed the same course of instruction but used advanced configuration F-4s.<sup>33</sup>

These training programs were not created in a vacuum. In North Vietnam, during Operation Linebacker, the Air Force had suffered one of its worst days in the entire war. On June 27, 1972, in a massive raid against Hanoi, Seventh Air Force lost four F-4s. Three were lost to MIGs with no aerial victories in exchange. Although the first days of Linebacker brought some Air Force success against the MIGs, the exchange ratio was approaching 1:1. General Ryan asked Momyer to contact General John Vogt, the current Seventh Air Force commander, to offer his thoughts on the prosecution of the war.

<sup>&</sup>lt;sup>30</sup> "History of the Tactical Air Command, 1 July 1972 – 30 June 1973" Office of TAC History, Headquarters Tactical Air Command, Langely Air Force Base, Virginia, 237, ACC History Office.

<sup>&</sup>lt;sup>31</sup> C.R. Anderegg, *Sierra Hotel: Flying Air Force Fighters in the Decade After Vietnam* (Washington, D.C.: Air Force History and Museums Program, 2001), 76.

<sup>&</sup>lt;sup>32</sup> "History of the Tactical Air Command, 1 July 1972 – 30 June 1973" Office of TAC History, Headquarters Tactical Air Command, Langely Air Force Base, Virginia, 238-241, ACC History Office.

<sup>&</sup>lt;sup>33</sup> "History of the Tactical Air Command, 1 July 1972 – 30 June 1973" Office of TAC History, Headquarters Tactical Air Command, Langely Air Force Base, Virginia, 243-244, ACC History Office.

Major General John Burns, who served under Momyer as the Vice Commander of the 8th Fighter Wing in 1967 and now serving as the Air Staff's deputy director of requirements, travelled to Saigon to see the operation. Burns assessment was damning, not only for Seventh Air Force, but also for TAC. Put simply, he wrote, "Our crews are inadequately trained for air combat."<sup>34</sup>

The lack of training for Air Force pilots for air-to-air combat in Vietnam has been documented in many works. It is fair to ask why it took Momyer nearly three years in command of TAC to enable any real change in Air Force training programs, especially since these changes occurred too late to impact the fight in Vietnam. The personnel policy of 'one pilot, one tour' virtually mandated an abbreviated approach to combat crew training. It was a complex math problem. The demand for crews mandated a production timeline to fill cockpits at a rate commensurate with the rate of exit from those same cockpits in Vietnam. With limited time, aircrew training focused on getting bombs on target. Momyer's experience told him it was the bombs that made it to the target that had the most impact on the campaign. It was not until the demand for crews in Vietnam diminished through the fall of 1971 that Momyer had the resources and time to address the air-to-air training. Still, had Momyer made air-to-air training his top priority the moment he took command instead of waiting for enterprising and dedicated young officers to battle the bureaucracy of the various staffs, Air Force pilots would probably have done better in the skies of North Vietnam. For this, Momyer was ultimately accountable.

In addition to the training shortfalls, Vogt's leadership of Seventh Air Force did not make the best of the resources Momyer provided. Vogt's predecessor, General John D. Lavelle, was relieved due to allegations of unauthorized bombing missions in North Vietnam. Vogt became Lavelle's replacement due at least in part to his association with Dr. Henry Kissinger, Nixon's National Security Advisor, as a student of Kissinger's at Harvard and also in Vogt's assignment as the director of the Joint Staff.<sup>35</sup> In direct contradiction to Momyer's tenure at Seventh Air Force, most messages from

<sup>&</sup>lt;sup>34</sup> Stephen Randolph, *Powerful and Brutal Weapons: Nixon, Kissinger, and the Easter Offensive* (Harvard University Press, Cambridge, Massachusetts, 2007), 315.

<sup>&</sup>lt;sup>35</sup> Stephen Randolph, *Powerful and Brutal Weapons: Nixon, Kissinger, and the Easter Offensive* (Harvard University Press, Cambridge, Massachusetts, 2007), 94-95.

Vogt's military superiors contained evidence of frustration over Vogt's prosecution of the campaign. Unable to replace Vogt due to his political connections, Ryan instead replaced his director of operations, Major General Alton Slay. Major General Carlos Talbott, who replaced Slay, wrote back to Ryan describing the chaotic nature of operations in Saigon. Talbott told Ryan forcefully, "The Wings were ready to revolt!" Momyer, who had much success relying on the abilities of his handpicked wing commanders while he served in Seventh Air Force, was sending forces to a command in disarray. 36

Despite the frustration over the execution of the air campaign,
Linebacker succeeded where Rolling Thunder had not. By early October 1972,
due in part to the failure of the North Vietnamese conventional offensive, a
breakthrough occurred in peace negotiations. The Americans and the North
Vietnamese agreed to a cease fire, leaving forces in place and the South
Vietnamese government in place, at least for the time being. Kissinger and
Nixon, believing peace was at hand, ceased all bombing above the 20th parallel
near the end of October. The peace was not to be. South Vietnam had major
objections to the communist forces remaining in the south and refused to sign
the agreement.<sup>37</sup>

Throughout November and the first half of December, Kissinger tried in vain to reconcile the disagreements between north and south. By mid-December, the talks had completely broken down. President Nixon, frustrated over the progress of peace negotiations, turned control of the war to the Chairman of the Joint Chiefs of Staff, Admiral Thomas Moorer. "I don't want any more of this crap about the fact that we couldn't hit this target or that one," Nixon told Moorer, "this is your chance to use military power to win this war, and if you don't, I'll consider you responsible."<sup>38</sup> On December 18, 1972, Linebacker II began with an all-out air campaign against targets in North Vietnam. After 11 days and hundreds of sorties, most notably over 700 B-52 sorties against the enemy's heartland, Hanoi agreed to talk. In late January of

<sup>&</sup>lt;sup>36</sup> Stephen Randolph, *Powerful and Brutal Weapons: Nixon, Kissinger, and the Easter Offensive* (Harvard University Press, Cambridge, Massachusetts, 2007), 311-315.

<sup>37</sup> Marvin E. Gettleman, ed., *Vietnam and America: The Most Comprehensive* 

Documented History of the Vietnam War (Grove Press, New York, 1995), 471.

<sup>&</sup>lt;sup>38</sup> As quoted in Howard Jones, *Crucible of Power: A History of U.S. Relations Since 1897* (SR Books, Lanham, Maryland, 2001), 403.

1973, the Paris Peace Accords ended direct American military involvement in the conflict.

Later, describing the campaign in his book, Momyer wrote, "What airmen had long advocated as the proper employment of Airpower was now the President's strategy – concentrated use of all forms of Airpower to strike at the vital power centers, causing maximum disruption in the economic, military, and political life of the country."39 While the signed peace accords closely followed the nearly two week unrestricted bombing campaign over North Vietnam, much had changed since Momyer had left Vietnam. First, the peace terms were remarkably different. While Johnson bargained for an independent South Vietnam free from North Vietnamese military influence, the January 1973 peace accords permitted a cease fire in place and the reunification of Vietnam through peaceful means. Second, the political environment had changed drastically. By 1972, Nixon's diplomatic efforts with China and the Soviet Union had all but isolated North Vietnam from their communist supporters. Third, the shift of the North Vietnamese strategy to a conventional campaign made it more open to impact from American airpower. Linebacker I had all but shown the North Vietnamese they could not succeed conventionally while American airpower remained in the country. Fourth, and maybe most importantly, Nixon wanted to get out of Vietnam while Johnson wanted to win in Vietnam, albeit while also refraining from starting a Third World War.

While other authors point out the differences in Nixon's control of the war versus Johnson's control of the war, the fact is, the two Presidents essentially fought two different wars in the same country. Momyer, missing this subtlety in his criticism of the war effort, believed Linebacker II's success was built upon the idea that airpower could be "strategically decisive if its application is intense, continuous, and focused on the enemy's vital systems." But, to paraphrase Momyer's own previous statement, the deeper reason for success was that the political objectives were finally consistent with the capabilities of the forces.<sup>40</sup>

<sup>39</sup> Airpower in Three Wars, 39.

<sup>&</sup>lt;sup>40</sup> For an example of a defense of the 'proper application of airpower,' see Earl H. Tiliford, *Crosswinds: The Air Force's Setup in Vietnam* (Texas A&M University Press, 2009), 239 – although his work criticizes air efforts for organizational reasons, he cites

The signing of the peace accords served as the beginning of the end of Momyer's last year of active duty military service. As Momyer neared the end of his career, the impressions of those he worked with everyday echoed many others heard through the years. "Reflecting back on it," Major General Robert W. Schinz said, "General Momyer is a very brilliant officer, very smart officer, and I had a lot of respect for him . . . I will tell you I never worked 2 harder years in my whole life than I did those 2 years at TAC as the DO. Oh, man, were those hard days!"41 General Richard Ellis, a direct subordinate of Momyer's as the Ninth Air Force Commander, remembered, "General Momyer had a way of exercising command that I thought a lot of." At meetings with his commanders, Ellis recalled Momyer set forth clear guidance. "Here's what I want you to do in the next so-and-so months," Ellis recollected Momyer saying. "He knew how to delegate responsibility, and he also held you accountable," Ellis remembered. "That's one of the things that a lot of commanders don't know how to do - to delegate and then to ensure that the accountability is still there," he finished.<sup>42</sup> When asked if he could verbalize a difference between Momyer and Dixon's leadership of TAC, Lieutenant General John J. Burns, who served as the Twelfth Air Force Commander under both men, recalled, "General Momyer had a great amount of credibility as an operational individual, and I observed General Dixon, when he came in, took pains to try not to change anything visibly, initially anyway, in operations." Burns remembered Momyer, "was always sensitive to operational principles and doctrinal concepts, and he always got deeply into detail into operations and how we operated . . . he tended to lean toward a centralized mode of operations." What Dixon did change was to, "go very strongly after the procedure and processes by which we did things and was extremely intensive about compliance."43

41-

the piecemeal application of airpower by Johnson as one of the differences with Nixon's application of the war. He also mentions some of the same reasons above but his analysis come off more on the side of the victory through application of airpower.

<sup>&</sup>lt;sup>41</sup> Major General Albert W. Schinz Oral History, by Dr. James C. Hasdorff, 20-22 April 1982, p. 185-186, K239.0512-1320, IRIS No. 1049771, AFHRA.

<sup>&</sup>lt;sup>42</sup> General Richard H. Ellis Oral History, Lt Col Maurice Maryanow, 17-21 August 1987, 138, K239.0512-1764, IRIS No. 1105347, AFHRA.

<sup>&</sup>lt;sup>43</sup> Lieutenant General John J. Burns Oral History, by Hugh N. Ahmann, 5-8 June 1984, January 1986, p. 347, K239.0512-1587, IRIS No. 1085466, AFHRA.

General Larry D. Welch, former USAF Chief of Staff and a man whose Air Force service covered the career of many TAC leaders, later recalled, "General Spike Momyer's understanding of Tactical Airpower – from North Africa to the modern era – dwarfed that of anyone else on the scene."<sup>44</sup> Perhaps the best summation of both Momyer's career and his time in command at TAC came from the man who served as his Vice Commander at TAC from 1970 to 1972. "Momyer was very demanding," Lieutenant General Jay T. Robbins recalled, "I always had a tremendous respect for him. I think he is one of a kind . . . in the Air Force. He has a keen mind on strategy and tactics, and he is a historian. He has read all about military doctrine . . . I think he was the most knowledgeable man in the Air Force, the Air Force has ever had in terms of tactical airpower. . . . I never really got to be where I felt I was a strategist, maybe a tactician in some respects but never did I think in the broad, strategic terms of tactical airpower. Spike Momyer did. . . . there won't be another one like him come along for a while neither."<sup>45</sup>

Not long after he retired in 1973, Momyer found himself back in Washington, D.C. and back in the employment of the United States Air Force. While Momyer was still in Vietnam in 1966, the Vice Chief of Staff of the Air Force, General Bruce Holloway, directed Air University to create a study on the use of airpower in Southeast Asia that would "evaluate the effectiveness of air power; identify and define air power lessons learned; assess the validity of current concepts and doctrine in the light of the air power operations; recommend modifications of existing concepts and doctrine to ensure more effective applications of air power; and record US air power accomplishments for historical purpose."<sup>46</sup> Air University first named this study Project Loyal Look but in early 1967, the name changed to Corona Harvest. The study was a compilation of personal experiences collected from a number of individuals who participated in the war. Panels of mid-level officers wrote the reports in long

-

<sup>&</sup>lt;sup>44</sup> General Larry D. Welch, USAF (Ret.) to General Charles A. Horner, USAF (Ret), 10 September 1999, Letter, Appendix C of General Robert J. Dixon Oral History, K239.0512-1591, IRIS No. 01134839, AFHRA.

<sup>&</sup>lt;sup>45</sup> Lieutenant General Jay T. Robbins Oral History, by Dr. James C. Hasdorff, 24-25 July 1984, p. 104-105, K239.0512-1593, IRIS No. 1064469, AFHRA.

<sup>&</sup>lt;sup>46</sup> Robert F. Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force*, vol. 2 (Maxwell Air Force Base, Alabama: Air University Press, 1989), 318.

sessions at Maxwell Air Force Base. Although Air University encouraged the writers to be frank, verification panels had to edit many of the lessons learned and recommendations. By mid-1973, the project produced 11 final reports on operations in Southeast Asia.<sup>47</sup>

General Horace M. Wade, who was then the Vice Chief of Staff and the Chairman of the Corona Harvest review panel, remembered that despite the sheer volume of the final reports, "you've got all of these opinions about the war in Southeast Asia, and you had nobody with a broad viewpoint to bring all these opinions together and meld them and sort out and give a good clear picture of how certain things were done in Southeast Asia."48 In November 1973, General Richard Ellis replaced General Wade as the Vice Chief of Staff and shortly thereafter directed the Corona Harvest working group to conclude their work as soon as possible. General Ellis wanted to hire a consultant to reconcile General Wade's concerns about the Corona Harvest reports. He believed a senior Air Force commander could provide an overview and appraisal of the analysis and recommendations in the Corona Harvest studies. Ellis, like Wade before him, felt the studies lacked perspective. In December 1973, General Ellis made the decision to hire recently retired General William Momyer as a paid consultant to the Vice Chief of Staff to review the Corona Harvest reports.<sup>49</sup> General Ellis later remembered the rationale behind Momyer's selection, "First of all, he was an authority dating back from World War II on air-ground relationships, especially with the Army and also with the Navy. He had been a commander in the field and had been the air commander in Vietnam, and he saw command relationships there. He also was a good judge of the lessons learned in terms of tactics and that sort of thing. He had also been commander of Tactical Air Command."50 In this capacity, Momyer would provide periodic reports direct to General Ellis with both his recommendations

<sup>&</sup>lt;sup>47</sup> Futrell, *Ideas*, *Concepts*, *Doctrine*, vol. 2, 318.317-321.

<sup>&</sup>lt;sup>48</sup> General Horace M. Wade Oral History Interview, by Mr. Hugh N. Ahmann, 10-12 October 1978, p. 575, K239.0512-1105, IRIS No. 1040558, AFHRA.

 <sup>&</sup>lt;sup>49</sup> Major General William Y. Smith, Memorandum for Record, Subject: Corona Harvest,
 16 July 1974, 168.7041-101, IRIS No. 1028226, from General Momyer Papers, AFHRA.
 <sup>50</sup> General Richard H. Ellis Oral History, by Lieutenant Colonel Maurice Maryanow, 17 21 August 1987, p. 184, K239.0512-1764, IRIS No. 1105347, AFHRA.

for Air Force action based on the studies' findings and with comments on the reports themselves.

Momyer's service as the Consultant to the Vice Chief of Staff finally began in April 1974 and lasted to August 1975. During that time period, Momyer reviewed over 65 Corona Harvest study documents for the Air Staff, wherein he recommended changes to the evaluation sections of each volume. As a parallel effort, Momyer also served as the Chairman of the Review Panel for Corona Harvest reports, charged with the dicey duty to cull classified or sensitive information from the reports, including information that could reflect poorly on the accomplishments of the Air Force.<sup>51</sup> Momyer's employment in this capacity highlighted the difficulty of drawing lessons learned from the conflict. The assessment required access to classified documents and it required a leader of the effort who could provide relevant guidance and inputs to the project, but by hiring Momyer for the job, the Air Force restricted its lessons to the lens of the man who fought and then supplied the forces for much of that war. An impartial evaluation of the Air Force's overall performance could not be expected through such an arrangement. It was likely not desired.

While Momyer was working on the Corona Harvest project, General David Jones, the Chief of Staff of the Air Force, asked him to analyze the collapse of the Air Force of South Vietnam (VNAF) during the early months of 1975. The communist conventional offensive that Momyer's airpower efforts made impossible from 1966-68 and American airpower efforts stopped in the spring of 1972, was not stopped by the VNAF and found final success when Saigon fell on April 30, 1975. Just over twenty days after the North Vietnamese Army rolled into downtown Saigon, Momyer completed the study and shortly thereafter presented it to the 1975 gathering of retired Air Force four star generals. It presented a comparative analysis of the successes and failures of airpower during the major North Vietnamese offensives of 1968, 1972, and 1975. Momyer's conclusions reflect much of what he believed was fundamental to the successful application of airpower. First, the lack of centralized control

<sup>&</sup>lt;sup>51</sup> Justification for Expert Appointment, 10 March 1975, 168.7041-88, IRIS No. 1025196, from General Momyer Papers, AFHRA; Corona Harvest Steering Committee Documents, 168.7041-114, IRIS No. 1028232, from General Momyer Papers, AFHRA.

in the VNAF led to fragmented employment. South Vietnamese Army commanders had operational control over VNAF assets. Second, the VNAF's aircraft were designed to fight in a permissive environment, and the North Vietnamese capabilities in the 1975 offensive were too strong for those aircraft. Third, after the last American air operations in 1972, there were no follow on interdiction efforts which permitted the North Vietnamese to undertake a sustained offensive in 1975. Finally, there was no joint planning effort to integrate South Vietnamese operations across military regions and there were not enough Airmen on planning staffs to ensure the proper employment of airpower. The Air University published the study in 1976 as *The Vietnamese Air Force*, 1951-1975: An Analysis of Its Role in Combat.<sup>52</sup>

When Air University published Momyer's analysis, it was delivered bound with another piece on the war in a series called the *USAF Southeast Asia Monograph Series*. This series was Momyer's brainchild. Shortly after Momyer began working with General Ellis, he convinced Ellis to sponsor a monograph series to tell Air Force combat operations in Southeast Asia. In Momyer's opinion, these monographs could provide a "vehicle for getting our Vietnam story told in a timely manner, couched in terms of how the war was actually fought, and unclassified in order to gain the widest audience." In July 1974, General Ellis tasked Lieutenant General Felix Rogers, the Commander of Air University, to have some students at Air University craft a number of these monographs. Although the stories were crafted in Montgomery, General Momyer's office was responsible for the editing and coordination of the volumes. Major A.J.C. Lavalle, who also served as the Executive Secretary of the Corona Harvest Review Panel, was Momyer's special assistant for the effort.

In late November of 1976, in a ceremony in the office of the CSAF, Momyer presented General Jones with 50 hardbound copies of the first volume

--

General William W. Momyer, "What Happened to the VNAF? An Analysis," 22 May 1975, 168.7041-157, IRIS No. 1028275, from General Momyer Papers, AFHRA.
 General William Momyer, Memorandum for General Ellis, Subject: Vietnam Monographs, 15 July 1974, Momyer Miscellaneous File, 168.7041-137, IRIS No. 1028255, from General Momyer Papers, AFHRA.

 <sup>&</sup>lt;sup>54</sup> General Richard H. Ellis, Vice Chief of Staff, to Lieutenant General Felix M. Rogers, Commander, Air University, Letter, 23 July 1974, Momyer Miscellaneous File.
 <sup>55</sup> Major Lavalle to Captain Largent, Memorandum, Subject: USAF Southeast Asia Monograph Series – Ceremony in General Jones' Office, 1500 hrs, 22 Nov 1976, Momyer Miscellaneous File.

of the series. This first volume included two stories - "A Tale of Two Bridges," an account of airpower's interdiction efforts against the Paul Doumer Bridge in Hanoi and the "Dragon's Jaw" Bridge in Thanh Hoa; and "Battle for the Skies over North Vietnam," a description of the fight for air superiority in North Vietnam. "For the general reader," General David Jones wrote in the foreword to the first volume, "these stories tell of airpower in human terms and should give some understanding of the spirit, courage, and professionalism of our U.S. airmen. To the student of airpower interested in improving the effectiveness of our Air Force, the monographs make an excellent case study of tactical air doctrine. The entire series is dedicated to ALL who served." As Momyer later wrote to the Air University Commander, the monographs were not to be a substitute for official Air Force history but "we needed something in print to bridge the gap." Momyer thought the monographs satisfied the need to "have something on the bookshelf that talks about the Air Force's role in the war." 58

From Momyer's efforts in the Corona Harvest study and the Southeast Asia Monographs sprung forth the idea of a book on airpower in Vietnam. According to Momyer, "After finishing that project [Corona Harvest], Jones [General David C., CSAF] asked me to write a book about the Vietnam war that could be used by schools." Momyer, Jones believed, possessed "a most comprehensive understanding and knowledge of tactical air concepts, doctrine, procedures and tactics and their application in time of war." Further, "he is a recognized air leader, an articulate spokesman for tactical airpower and an experienced air commander." In this new capacity, Momyer's new title was Expert in the Office of the Vice Chief of Staff. Momyer's own words reveal what he believed the book was about. As the volumes of the *USAF Southeast Asia Monograph Series* were published, Momyer sent copies to both active duty and retired general officers whom he served with throughout his career. Each copy was accompanied by a personal letter from Momyer, often mentioning the

<sup>&</sup>lt;sup>56</sup> Lavalle to Largent, 22 Nov 1976, Momyer Miscellaneous File.

<sup>&</sup>lt;sup>57</sup> Major A.J.C. Lavalle, ed., *USAF Southeast Asia Monographs Volume I: The Tale of Two Bridges and the Battle for the Skies over North Vietnam* (Washington, D.C.: Office of Air Force History, 1985), iii.

<sup>&</sup>lt;sup>58</sup> General William W. Momyer to Lieutenant General Raymond B. Furlong, Commander, Air University, Letter, 20 December 1976, Momyer Miscellaneous File.

<sup>&</sup>lt;sup>59</sup> General William W. Momyer to General John D. Ryan, Momyer Miscellaneous File.

<sup>&</sup>lt;sup>60</sup> Justification for Expert Appointment, Momyer Miscellaneous File.

progress of his book. "My book is in the final stages," he wrote to General John W. Vogt, the man who led Seventh Air Force during the two LINEBACKER campaigns, "... so we should see an overall story of airpower in three wars sometime next fall, if all goes well. I have not only discussed how we flew the missions but the controversies about command and control and targeting are covered in detail. I hope we organize better for the next war since there won't be time to go through the arguments of World War II, Korea and Vietnam."<sup>61</sup> To Lieutenant General Alton D. Slay Momyer wrote, "I am hopeful it will serve a useful purpose in helping our troops to come to understand the role of airpower in World War II, Korea, and Vietnam."<sup>62</sup>

"If all goes well," Momyer wrote in another letter, "there should be a book on the shelf next fall that says what airmen believe about airpower -- at least what Momyer thinks they believe."63 One of the more revealing passages came from a letter to Major General Woodard E. Davis, Jr. "I have set forth many of the doctrinal positions we believe about airpower. I am sure the Army, Navy, and Marines aren't going to be happy with some of the passages, but it is high time for airmen to say what they believe about airpower and quit worrying about what other people think, including the other services. I have tried to set forth these beliefs in a rational but, obviously, in a somewhat biased manner. How else can one recite his beliefs? So the charge of parochialism is inevitable, and I'm prepared to accept it."64 Another letter included the following line: "The book should make a valuable text for airmen who plan for the future by a better understanding of what we thought about airpower in the past."65 To his former Deputy Chief of Staff for Operations at Seventh Air Force, Momyer wrote, "It seems everybody but airmen write about strategy and employment of airpower. I started with the idea of focusing on the Vietnam war, but soon concluded that World War II and Korea were an inseparable part of the beliefs about what

<sup>&</sup>lt;sup>61</sup> General William W. Momyer to General John W. Vogt, Letter, 17 January 1977, Momyer Miscellaneous File.

<sup>&</sup>lt;sup>62</sup> General William W. Momyer to Lieutenant General Alton D. Slay, Deputy Chief of Staff, Research and Development, 17 January 1977, Momyer Miscellaneous File.

 $<sup>^{63}</sup>$  General William W. Momyer to General Horace M. Wade, Letter, 17 January 1977, Momyer Miscellaneous File.

<sup>&</sup>lt;sup>64</sup> General William W. Momyer to Major General Woodard E. Davis, Letter, 16 March 1977, Momyer Miscellaneous File.

<sup>&</sup>lt;sup>65</sup> General William W. Momyer to Major General Woodard E. Davis, Jr., Letter, 11 May 1977, Momyer Miscellaneous File.

airpower could and couldn't do."<sup>66</sup> Finally, in the book's introduction, Momyer wrote, "What I offer in this book, as fairly as I can, is an account of the way airpower looked to me from the perspectives I think will matter most to airmen."<sup>67</sup>

The Government Printing Office first published Airpower in Three Wars in 1978. Coming in at just over 380 pages, the book's format is not traditional for a historical account of airpower. This is not surprising for a man of Momyer's background. The table of contents reveals a book based on years of experience. The first three chapters reflect Momyer's background in doctrine creation. Just as the 1953 version of Air Force basic doctrine covered how airpower fit into the greater realm of the national security strategy, Momyer's first chapter captures the strategy of airpower employment. Meanwhile, the second and third chapters cover a subject Airmen have felt strongly about since the first days of airpower: command and control. As stated in 1943's seminal Field Manual 100-20, The Command and Employment of Air Power, "The inherent flexibility of air power is its greatest asset. This flexibility makes it possible to employ the whole weight of the available air power against selected areas in turn; such concentrated use of the air striking force is a battle winning factor of the first importance. Control of air power must be centralized and command must be exercised through the air force commander if this inherent flexibility and ability to deliver a decisive blow are to be fully exploited."68

Later chapters follow the doctrinal priorities of FM 100-20. The first priority, "to gain the necessary degree of air superiority," appears in chapter four. The second priority, "to prevent the movement of hostile troops and supplies into the theater of operations or within the theater," what is known as interdiction, Momyer describes in chapters five and six. And the third priority, "to participate in a combined effort of the air and ground forces in the battle area," appears in chapters seven and eight. Each section of Momyer's book

-

 $<sup>^{66}</sup>$  General William W. Momyer to Major General Gordon F. Blood, Letter, 2 March 1977, Momyer Miscellaneous File.

<sup>&</sup>lt;sup>67</sup> General William W. Momyer, *Airpower in Three Wars* (Maxwell Air Force Base, Alabama: Air University Press, 2003), xiii.

<sup>&</sup>lt;sup>68</sup> War Department Field Manual (FM) 100-20, *Command and Employment of Air Power*, 21 July 1943, 2.

traces these airpower roles through the course of the three wars.<sup>69</sup> The book is strongest in the analysis of reconnaissance operations, almost as strong in airlift, and besides a passing mention of Farm Gate, virtually ignores special operations.<sup>70</sup>

For a book that devotes the majority of its pages to a war that many have said was partially lost because of the Air Force's tie to a strategic bombing doctrine, not one of the chapters focuses exclusively on that aspect of the airpower mission. In fact, in early drafts, Momyer's book did not even address what is traditionally viewed as the only strategic bombing effort of the Vietnam War, LINEBACKER II. According to Lieutenant General Glen W. Martin, who retired as the Vice Commander of Strategic Air Command, the Vice Chief of Staff asked Martin to review an initial draft of Momyer's book. He did in great detail and corresponded with Momyer. He later recalled, "One thing I did was to convince him that he should include, as far as Vietnam was concerned, a substantial treatment of the strategic operations, Linebacker II, which strangely enough he had left out."71 Although Momyer introduced the book stating his reason for writing was due to a number of his colleagues asking him to record his thoughts "about the employment of airpower, especially tactical airpower, after 35 years in the profession," he went on to write, "I hadn't any illusions of being blessed with special wisdom, but, as they said, no one else shared my perspective on tactical airpower." Further, Momyer would not address strategic bombing in Germany or Japan because he did not participate in those campaigns. However, he did "have some strong opinions about the mistakes and successes of those campaigns, opinions which I'll share with other airmen in private, but I don't want those judgments lying around in a book like this one where future airmen might see them and suppose they were based on authoritative, firsthand observation."72

Where Momyer decided to include Linebacker II is telling. He placed it at the end of his chapter on interdiction, an awkward fit at first glance but one

-

<sup>72</sup> Momyer, Airpower in Three Wars, xi – xii.

<sup>&</sup>lt;sup>69</sup> FM 100-20, Command and Employment of Air Power, 10-11.

<sup>&</sup>lt;sup>70</sup> Tactical Air Command Manual (TACM) 2-1, Tactical Air Operations, 1978, i.

<sup>&</sup>lt;sup>71</sup> Lieutenant General Glen W. Martin Oral History, by Lieutenant Colonel Vaughn H. Gallacher, 6-10 Febraury 1978, p. 238, K239.0512-982, IRIS No. 1028878, AFHRA.

that underscored again his fundamental belief if the indivisibility of theater airpower.

In a May 1977 letter to his friend Lieutenant General William Y. Smith, Momyer wrote that his book might result in "heartburns within some elements of the Air Force, Army and Navy; but life is full of heartburns, so it must be recognized that if one writes, one can expect disagreements." Momyer realized that putting his thoughts on paper would open his thoughts to critical evaluation. He was right. A brief internet search using the search engine 'Google Scholar' shows nearly one hundred and fifty citations of his book in scholarly articles, journals, or books. A majority of authors citing Momyer's work use the book to show the fallacy of Air Force thinking both approaching and throughout the Vietnam War. It was not what Momyer intended. Despite his intent, Momyer's book does not appear on any military professional reading list or in the curriculum of any of the service's professional development institutions. His work justified and rationalized more than criticized American military efforts in Vietnam. As such, it provides little use in academia.

After completing *Airpower in Three Wars*, Momyer drifted from the Air Force. He became somewhat notorious for dismissing research requests over the years and faded away to the true retired life. In December 2002, General Momyer emerged again and crafted an updated foreword for *Airpower in Three Wars*. Commenting on operations in the Persian Gulf, Kosovo, and Afghanistan; Momyer concluded "that the fundamentals that airmen have held onto in the employment of airpower were demonstrated in our recent wars without qualification."<sup>74</sup> Momyer himself believed that after nearly a quarter century of progress, the fundamentals of airpower doctrine remained the same. In many ways, he was right. Airpower doctrine did not change significantly from one war to the next. But what did change in every war were the compromises and unique arrangements that required not only flexible airpower, but also flexible command. Momyer had made concessions in Vietnam. In fact, it was one of the strengths of his leadership. The overarching fault of his book was a characterization of doctrine as a guide and not as a starting point.

<sup>74</sup> Airpower in Three Wars, viii

<sup>&</sup>lt;sup>73</sup> General William W. Momyer to Lieutenant General William Y. Smith, Assistant to the Chairman, Joint Chiefs of Staff, 3 May 1977, Momyer Miscellaneous File.

For most of their retirement years, the Momyer's lived in a modest town home in Arlington, Virginia. In 2003 they moved to the warmer climate of Florida to be near Billie Jean and their grandchildren and great grandchildren. In October 2004, at the age of 90, Pat died of a heart attack in their home in Melbourne, Florida. Days later, she was laid to rest in Arlington Cemetery. Eight years later on October 24, 2012, General William Wallace Momyer was interred in Arlington next to his beloved bride. It was a fitting final resting place for an American warrior and the woman he loved.

## Conclusion

The American experience in Vietnam left General William Momyer as the most accomplished of America's forgotten airpower leaders. Momyer deserves to be recalled. He was the bridge between the first generation of American Airmen who fought in World War II and Korea and the third generation of Airmen who set the conceptual foundations for and fought in the Gulf War of 1991. This work illustrates that bridge, identifies what intellectual elements support it, and gives flesh to the man who built it.

In many ways, the first generation of Airmen was defined by the publication of Field Manual 100-20, Command and Employment of Air Power. Published in July of 1943 in response to the American airpower experience in Tunisia, FM 100-20 put in black and white what airpower advocates had believed for many years. It laid forth the central beliefs of the first generation of Airmen and set the foundation for all to follow. Specifically, it stated in bold and capital letters the importance of some central tenets of airpower: the coequality of land and air power; the importance of air superiority; and the essential nature of centralizing command of airpower under an Airman.

Momyer lived the events that spurred FM 100-20. For him, it was nearly a gospel. He fought across Tunisia and saw the impact of an emphasis on air superiority as the enabler of all to follow. Momyer's participation in the bombing and surrender of Pantelleria reinforced the belief in the co-equality of land and air power. This was driven home when Momyer's men made the island fortress their home. They saw first-hand the destructive power of a continuous air assault. The assault on Sicily once again put Momyer's men in support of ground operations but it was really the battles of Salerno that further reinforced the importance of the centralized command and control of airpower in support of a ground campaign. Momyer's group was an integral part of keeping the Allied forces ashore as Spaatz massed the effects of airpower in support of the Allied forces on the Salerno beachhead. Momyer's World War II combat experience was the foundation of all that would follow, for him and the United States Air Force.

A return to the states and an assignment in Orlando at the Army Air Forces Board provided an opportunity for Momyer to meld his airpower experience with analytical thought. He had the chance not only to assess his experiences, but also to learn through the study of other battles in other theaters of war. This provided a unique combination of timing and experience that formed the perfect springboard for Momyer's place of importance in the second generation of Airmen.

While at Orlando and Langley, Momyer became an advocate for airpower. Time after time he was faced with the opportunity to state his beliefs, both on paper and in discussions with leaders from all services. During this time, Momyer's belief in the indivisible nature of airpower began to take form. Many Airmen emerged from World War II, Korea, and the advent of nuclear weapons with a belief in the power of strategic airpower. Momyer, on the other hand, developed a core and abiding belief in the power of theater airpower. Even as the atomic age came to dominate so much, Momyer looked at the challenges of the age from the perspectives of a theater Airman. He looked at airpower for the way it could best be employed in concert with a ground campaign. This did not limit his thoughts to the close air support of troops in combat, but rather how airpower could contribute overall to the achievement of military objectives.

Momyer's writings during this time first explicated his vision for airpower's optimum application. In the 1949 study on tactical air operations Momyer authored during his first tour at TAC he wrote, "the fundamental concept of tactical air operations is predicated on the application of Tactical Air Power against those enemy objectives or target complexes not having an immediate strategic significance as pertains to an imminent collapse of an enemy nation." Further, "It is evident that there are a large number of target systems that are not suitable for atomic attack yet have a strategic and tactical significance as pertains to the ability of an enemy to continue waging an effective and decisive war. Such a category of targets embrace the enemy's military force, transportation system, fuel system, industrial facilities, power systems and other varied types of target systems." Momyer was one of the first operational Airmen to think of targets in terms of systems, thinking which became commonplace by the 21st Century but was rare in the 1950s.

<sup>&</sup>lt;sup>1</sup> Kohn and Harahan, Air Superiority, 63; TAC, "Tactical Air Operations," 1.

During his time at Maxwell, Momyer further molded this theory into one of indivisible airpower. This was the quiet and intellectual counterinsurgency waged against the belief in the primacy of strategic airpower, and more importantly, the lines drawn between and the compartmentalization of tactical and strategic airpower. As he wrote in his Air War College thesis, "The arbitrary division of Air Power into Strategic and Tactical has tended to compartment the thinking of air strategists so as to compromise an exploitation of the full potential of Air Power as a whole."2 As the conflict in Korea proved all wars would not be nuclear in nature, Momyer's leadership of the doctrinal efforts at Maxwell provided an opportunity to set forth his vision of airpower. Of the organization of air forces in Korea, Momyer believed it was the, "sum of these forces that provide us with the term theater air forces since some are tactical in nature and others are classified differently," and, "it is this total force that gives meaning to the term theater air force not the types of equipment operated, i.e., light bomber, heavy bomber, etc." This was a further refinement of his concept of indivisible airpower but also a throwback to his belief in the power of the theater airpower setup in the Mediterranean theater of World War II. While at National War College, Momyer tied this belief of a theater air force together with the optimum command and control arrangements to employ it. As he wrote in his thesis, "military readiness is not only dependent upon the character and capability of military forces to conduct operations, but also upon a proper command structure that is effectively conceived and designed to exploit the capacities of the forces."4

Later when Momyer returned to Langley for a second tour, he embraced again the heart of airpower thought. Much as General Quesada had influenced Momyer in the early years of his career, the years he spent at Langley with the

<sup>&</sup>lt;sup>2</sup> Momyer, "A Concept of Tactical Air Operations," 25.

<sup>&</sup>lt;sup>3</sup> Major General John DeF. Barker, Deputy Commanding General, Air University, to Lieutenant General Idwal H. Edwards, Deputy Chief of Staff, Operations, Headquarters, United States Air Force, Letter, 11 January 1951, K239.1616-17, IRIS No. 0481380, AFHRA; Major General John DeF. Barker, Deputy Commanding General, Air University, to Mr. Thomas K. Finletter, Secretary of the Air Force, Letter, 1 June 1951, K239.1616-17, IRIS No. 0481380, AFHRA; Major General John DeF. Barker, Deputy Commanding General, Air University, to General Hoyt S. Vandenberg, Chief of Staff, United States Air Force, Memorandum, 2 July 1952, K239.1616-17, IRIS No. 0481380, AFHRA.

<sup>4</sup> Colonel William W. Momyer, "Strategic Considerations in the Development of a NATO

<sup>&</sup>lt;sup>4</sup> Colonel William W. Momyer, "Strategic Considerations in the Development of a NATC Air Strategy," 1-5.

TAC Commanders Weyland and Everest, two of the most known tactical Airmen of the day, had a great impact on Momyer. Weyland in particular was a kindred soul, stating at his assumption of command, "I have stressed the indivisibility of air power and the necessity of centralized control of air resources as much as any man alive." As the nation became more focused on limited warfare, Momyer's position on the TAC staff offered opportunity to influence the development of weapon systems for future conflict. In a move that would later prove controversial, Momyer's theory of indivisibility of airpower translated into the indivisibility of aircraft capabilities. He believed strongly in the power of an all-purpose fighter that could accomplish nuclear and non-nuclear missions. Momyer wanted an aircraft that could fly long distances, confront contested battlespace, and then effectively put any number of different kinds of munitions on target. In Momyer's belief, preparing for general war also meant preparing for limited war.

By 1960, Momyer was on the precipice of becoming a leading Airman of his generation. Timing provided the final push to reach this destiny. In 1961, President Kennedy took office and focused the nation's attention on limited war. Nearly simultaneously, the power of Strategic Air Command had reached its height as General Curtis LeMay took the reins as the Air Force Chief of Staff. Appropriately, many of the most powerful and important positions in the Air Force were filled by 'strategic Airmen,' those who believed the war winning application of airpower ruled the day. For the first time in years, LeMay placed an Airman in charge of TAC who had never flown or commanded in fighter or pursuit aircraft. As Sweeney moved to TAC, Momyer moved to the Director of Operational Requirements on LeMay's Air Staff. With a shift to limited warfare and an Air Staff full of strategic Airmen, Momyer became the most important tactical Airman in the Air Force as the two star general shaping so much of the service's core airframe acquisitions. In this role, his belief that higher and faster was always better, the power of his beliefs, and the strength of his personality virtually set the foundation for the Air Force that would follow Vietnam.

<sup>&</sup>lt;sup>5</sup> Quoted in Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force*, vol. 1 (Maxwell Air Force Base, Alabama: Air University Press, 1989), 442.

Thereafter, Momyer's time in command in Vietnam built the structure of the post-war Air Force. Momyer was the clear choice for command of Seventh Air Force and the timing of his appointment provided the springboard for ultimate impact. He took command of an organization that had only recently reached the organizational status of numbered air force and carried it through the height of American activity in that country. He fought for centralized control of airpower under a theater Airman, the importance of air superiority, technological advances in command and control, an integrated targeting campaign, tactical improvements, and measurement of effect. He carried these same priorities to Tactical Air Command when he left the battlefields of Vietnam. As America's involvement in that country lessened, the influence of tactical Airmen in the Air Force gradually eclipsed those of LeMay's persuasion. As this all occurred, the lead Tactical Airman, the Commander of TAC, was none other than General William Momyer.

Momyer's link to the third generation of American Airmen became manifest during the Gulf War and the early 1990s. This Gulf War defined the generation that followed Momyer, personified here by Colonel John Warden and Lieutenant General David Deptula. Momyer was theater, indivisible airpower. The third generation of Airmen was strategic attack and effects-based operations, a concept which rested upon Momyer's ideas of indivisible airpower and a host of new weapons and stealth platforms. At the conclusion of the Gulf War, Warden, one of the architects of the air campaign, wrote, "the air campaign had imposed not only strategic paralysis on the whole state of Iraq but had imposed operational paralysis on the army in Kuwait." As Warden's biographer, John Andreas Olsen, points out, the airpower coalition set the conditions for victory with "just over ten thousand sorties and twenty thousand tons of bombs, as opposed to over eight million tons dropped on Vietnam in seven years."

While the nature of the fight, the enemy, and the political environment of the Gulf War was significantly different than the war in Vietnam, it illustrates

-

<sup>&</sup>lt;sup>6</sup> As quoted in John Andreas Olsen, *John Warden and the Renaissance of American Air Power* (Potomac Books, Washington, D.C., 2007), 240.

<sup>&</sup>lt;sup>7</sup> John Andreas Olsen, *John Warden and the Renaissance of American Air Power* (Potomac Books, Washington, D.C., 2007), 241.

how Momyer's leadership of his generation provided the bridge to get there. Warden believed the Gulf War capitalized on, "high technology, unprecedented accuracy, operational and strategic surprise through stealth, and the ability to bring all of an enemy's key operational and strategic nodes under near simultaneous attack." In a publication written shortly after the war, Deptula, who as a Lieutenant Colonel was one of the key air planners, wrote, "the first night of the Gulf War air campaign demonstrated that the conduct of war had changed." In describing the change, Deptula noted, "the construct of warfare employed during the Gulf War air campaign has become known as parallel warfare, and was based upon achieving specific effects, not absolute destruction of target lists."

Momyer saw airpower in effects based operations well before Warden or Deptula. Although the phrase became a buzzword in defense circles following the Gulf War, Momyer's mind harbored the notion some thirty years earlier. His explanations of the effects of the air efforts in North Vietnam to McNamara were highly regarded. Momyer consistently fought for centralized control of air power in order to affect an air campaign specifically targeted against North Vietnam's support for the insurgency in a unified manner within the given political restrictions. He saw these proposed campaigns in terms of effects. Momyer's vision of airpower's most effective and efficient application came to bear in the Gulf War. In his own commentary on the results of the Gulf War, Momyer wrote that the conflict was "abbreviated by the wedding of established airpower doctrine with dramatically new technologies . . . we would have achieved success without the new technologies, but it would have taken more time and precious human resources."10 New weapons, new technologies, fewer political restrictions, and the framework to use them all to advantage signaled the beginning of the third generation of Airmen.

It was not just the application of airpower. The concept of theater command and control exhibited during the Gulf War was the realization of

.

<sup>&</sup>lt;sup>8</sup> John Andreas Olsen, *John Warden and the Renaissance of American Air Power* (Potomac Books, Washington, D.C., 2007), 241.

<sup>&</sup>lt;sup>9</sup> Brigadier General David Deptula, *Effects-Based Operations: Change in the Nature of Warfare* (Aerospace Education Foundation, Arlington, Virginia), 2-3.

<sup>&</sup>lt;sup>10</sup> General William W. Momyer, *Airpower in Three Wars* (Maxwell AFB, AL: Air University Press, 2003), viii.

Momyer's dream of a theater Airman. General Chuck Horner served as the Joint Forces Air Component Commander (JFACC) for the campaign, a position Momyer had fought hard for in Vietnam. Although he attained it then, the Air Force would by 1991, partly upon Momyer's intellectual arguments dating to the mid-1960s.

Almost ten years after the Gulf War, General John P. Jumper, then the commander of Air Combat Command, in the spirit of Momyer's emphasis on the importance of systems for command and control, declared the Air Operations Center (AOC) a weapons system and thereby formalized the funding and acquisition processes to equip this important asset. Seen as a revolutionary step in 2000, the weapons system definition reflected Momyer's vision: "the weapon system . . . through which the Joint Forces Air Component Commander (JFACC) exercises command and control of [air and space] forces. The JFACC employs the AOC to maneuver and mass overwhelming [air and space] power through centralized control and decentralized execution to produce desired operational and strategic effects in support of the Joint Force Commander's (JFC) campaign."<sup>11</sup> The following institutionalization of the CFACC's Air Operations Center as a Weapons System further solidified the importance Momyer had placed in the technology and systems that enabled centralized command and control across a vast battlespace.

America's first generation of Airmen saw airpower in platforms and mission sets. Tactical airpower meant fighters and pursuit planes supporting the ground fight. Strategic airpower meant bombers and strategic targets that could have war winning effects. Momyer led the second generation of Airmen through doctrine, thought, and command into seeing airpower as indivisible, best thought of as theater airpower. The third generation of Airmen brought this notion to organizational fruition in 1991 with the merging of the Strategic Air Command and the Tactical Air Command into one command, the Air Combat Command. This was easily the most significant structural change in the Air Force's history and an acknowledgment of Momyer's vision of indivisible airpower.

\_

<sup>&</sup>lt;sup>11</sup> Concept of Operations for Aerospace Operations Center (Langley AFB, Va.: Air Combat Command, Aerospace Command, Control, Intelligence, Surveillance, and Reconnaissance Center, 2001), 9.

As an author of doctrine and as a theater airpower proponent, Momyer built the conceptual foundations of the second generation. As warfighting commander in Vietnam, he put those conceptual foundations to the test and modified them to the political realities of the war. As the 'organize, train, and equip' commander following the war, he made the changes and began the programs to take America into airpower's third generation. Momyer was bold and opinionated, steadfast and strong. He maintained the courage of his convictions but adopted when the mission called for it. Like many great leaders, he was also flawed - at times micromanaging and overly immersed in details. Because of and in spite of all of these factors, Momyer was the premier tactical Airman of his generation. Whether it was the President, the Secretary of Defense, the Chairman of the Joint Chiefs, CINCPAC, or many others – each recognized Momyer's gift for the comprehension of all facets of theater airpower and his ability to articulate them in a way they could be understood by almost any crowd. In large part due to Momyer, he was also the last great tactical Airman. The foundations he set for the indivisibility of airpower meant that no longer would Airmen be judged in categories of tactical and strategic. They were Airmen, fighting to apply airpower in a manner to further our nation's objectives.

And what of the fourth generation of Airmen, those men and women who will bring airpower into its second century? In the updated 2002 introduction to his book, Momyer wrote, "The doctrine that has guided airpower employment, it seems to me, remains an enduring foundation that bodes well for the integration of air and space assets into one cohesive force." Will Airmen today rely upon that same enduring foundation? Will they be emboldened by conventional victories and decisive air operations against Iraq, Kosovo, and Libya? Or will the experience of counterinsurgency in Afghanistan and Iraq define them? As America battles with fiscal uncertainty, Airmen will face choices of a scope not confronted for a generation or more. As Momyer and his cohorts once did, they must balance the risk of the most dangerous future with that of the most likely. Just as Momyer did, they must account for

\_

<sup>&</sup>lt;sup>12</sup> General William W. Momyer, *Airpower in Three Wars* (Maxwell AFB, AL: Air University Press, 2003), viii.

political and strategic reality and use the foundation of airpower thought as a guiding light. And, in Momyer's own words, they "must look closely at their history to prepare themselves for the future." <sup>13</sup>

 $<sup>^{\</sup>rm 13}$  General William W. Momyer, Airpower in Three Wars (Maxwell AFB, AL: Air University Press, 2003), 379.

# **Bibliography**

#### **Books**

- Alexander, Kristen. Clive Caldwell, Air Ace. Crows Nest, New South Wales: Allen & Unwin, 2006.
- Anderegg, C. R. Sierra Hotel: Flying Air Force Fighters in the Decade After Vietnam. Washington, D.C.: Air Force History and Museums Program, 2001.
- Anthony, Victor B. and Richard R. Sexton. *The United States Air Force in Southeast Asia: The War in Northern Laos*, 1954-1973. Washington, D.C.: Center for Air Force History, 1993.
- Atkinson, Rick. *An Army at Dawn: The War in North Africa, 1942-43.* New York: Henry Holt and Company, 2002.
- Bell, Kenneth H. 100 Missions North: A Fighter Pilot's Story of the Vietnam War. McLean, VA: Brassey's, 1993.
- Boyne, Walter J. Beyond the Wild Blue: A History of the US Air Force. New York: St. Martin's, 1997.
- Benedict. John D. *Muskogee and Northeastern Oklahoma*. S.J. Clarke Publishing Company, 1922.
- Bishop, Chris and Chris Chant. *Aircraft Carriers* St. Paul, Minnesota: Motorbooks International, 2004.
- Bond, Charles R. and Terry H. Anderson. *A Flying Tiger's Diary*. College Station, Texas: Texas A&M University Press, 1988.
- Breuer, William B. *Operation Torch: The Allied Gamble to Invade North Africa.* New York: St. Martin's Press, 1985.
- Broughton, Jack. *Going Downtown: The War Against Hanoi and Washington*. New York: Orion Books, 1988.
- Builder, Carl H. *The Icarus Syndrome: The Role of Air Power Theory in the Evolution and Fate of the U.S. Air Force*. New Brunswick: Transaction Publishers, 1994.
- Cameron, Rebecca Hancock. *Training to Fly: Military Flight Training 1907-1945.*Air Force History and Museums Program, 1999.
- Clark, James G. *History of William Jewell College*. St. Louis, Missouri: Central Baptist Print, 1893.
- Clodfelter, Mark. *The Limits of Air Power: The American Bombing of North Vietnam.* Lincoln, Nebraska: The University of Nebraska Press, 1989.
- Coggins, Jack. *The Campaign for North Africa*. New York: Doubleday and Company, Inc., 1980.
- Cooling, Benjamin Franklin, ed. *Case Studies in the Achievement of Air Superiority.* Washington, D.C.: Center for Air Force History, 1994.
- Cosmas, Graham A. *MACV: The Joint Command in the Years of Escalation*, 1962-1967. Washington, D.C.: United States Army Center of Military History, 2006.
- Crane, Conrad C. *American Airpower Strategy in Korea*, 1950-1953. Lawrence, Kansas: University Press of Kansas, 2000.
- Craven, Wesley Frank, and James Lea Cate, eds. *The Army Air Forces in World War II*, Vol. 1, *Plans & Early Operations, January 1939 to August 1942*. Chicago: University of Chicago Press, 1949.

- -----. The Army Air Forces in World War II, Vol. 2, Europe: Torch to Pointblank, August 1942 to December 1943. Chicago: University of Chicago Press, 1949.
- -----. The Army Air Forces in World War II, Vol. 5, The Pacific: Matterhorn to Nagasaki . Chicago: University of Chicago Press, 1949.
- Culick, Fred and Spencer Dunmore, *On Great White Wings: The Wright Brothers and the Race for Flight* New York: Hyperion, 2001.
- Daddis, Gregory A. *No Sure Victory: Measuring U.S. Army Effectiveness and Progress in the Vietnam War.* New York: Oxford University Press, 2011.
- Davidson, Phillip B. *Vietnam at War, The History, 1946-1975.* Novato, California: Presidio Press,1988.
- -----. Secrets of the Vietnam War. Novato, California: Presidio Press, 1990.
- Davies, Peter. F-105 Wild Weasel Vs SA-2 'Guideline' SAM, Vietnam, 1965-1973. Osceola, Wisconsin: Osprey Publishing, 2011.
- -----. *USAF F-4 Phantom II, MiG Killers 1965-68.* Osceola, Wisconsin: Osprey Publishing Limited, 2004.
- Davis, Richard G. *Carl A. Spaatz and the Air War in Europe.* Center for Air Force History: Washington, D.C., 1993.
- Dean, David J. *The Air Force Role in Low-Intensity Conflict.* Maxwell AFB, Alabama: Air University Press, 1986.
- Dorr, Robert F. *Air Combat: An Oral History of Fighter Pilots*. New York: Penguin Group, 2006.
- Drendel, Lou. . . . And Kill MIGS: Air to Air Combat in the Vietnam War. Warren, Michigan: Squadron/Signal Publications, Inc., 1974.
- Drew, S. Nelson ed. *NSC-68: Forging the Strategy of Containment.* Washington, D.C.: National Defense University, 1994.
- Dryden, Charles W. *A-Train: Memoirs of a Tuskegee Airman*. Tuscaloosa, Alabama: University of Alabama Press, 1997.
- Flammer, Phillip M. *The Vivid Air: The Lafayette Escadrille.* Athens, Georgia: University of Georgia Press, 2008.
- Faust, Albert Bernhardt. *The German Element in the United States*. Houghton Mifflin Company, 1909.
- Fogleman, Aaron Spencer. *Hopeful Journeys*. University of Pennsylvania Press, 1996.
- Ford, Ken. *Operation Crusader 1941: Rommel in Retreat.* Oxford, United Kingdom: Osprey Publishing, 2010.
- Freedman, Lawrence. *The Evolution of Nuclear Strategy*. New York: Palgrave Macmillan, 2003.
- Frisbee, John L. ed. *Makers of the United States Air Force*. Washington, D.C.: Air Force History and Museums Program, 1996.
- Frumkin, Norman. Recession Prevention Handbook, Eleven Case Studies, 1948-2007, New York: M.E. Sharpe, Inc., 2010.
- Fry, Joseph A. *Debating Vietnam: Fulbright, Stennis, and their Senate Hearings*. Lanham, Maryland: Rowman and Littlefield Publishers, 2006.
- Futrell, Robert Frank. *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force*, Vol. 1. Maxwell Air Force Base, Alabama: Air University Press, 1989.
- -----. *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force,* Vol. 2. Maxwell Air Force Base, Alabama: Air University Press, 1989.

- -----. *United States Air Force in Korea*, 1950-1953. Washington, D.C.: Office of Air Force History, 1983.
- -----. The United States Air Force in Southeast Asia: The Advisory Years to 1965. Washington, D.C.: Office of Air Force History, 1981.
- Frisbee, John L. ed. *Makers of the United States Air Force*. Washington, D.C.: Air Force History and Museums Program, 1996.
- Gettleman, Marvin E., ed. *Vietnam and America: The Most Comprehensive Documented History of the Vietnam War.* New York: Grove Press, 1995.
- Godspeed, Thomas Wakefield. *A History of the University of Chicago*. Chicago, Illinois: University of Chicago Press, 1916.
- Gorman, Earl J. *Fire Mission: The World of Nam, a Marine's Story*. Clarendon Hills, Illinois: Red Desert Press, 2008.
- Graebner, Norman A., ed. *The National Security, Its Theory and Practice*, 1945-1960. Oxford, United Kingdom: Oxford University Press, 1986.
- Hall, R. Cargill, ed. *Case Studies in Strategic Bombardment*. Washington, D.C.: Air Force History and Museums Program, 1996.
- Hammel, Eric. *Khe Sanh: Siege in the Clouds, An Oral History.* New York: Crown Publishers, 1989.
- Hannah, Craig C. *Striving for Air Superiority: The Tactical Air Command in Vietnam.* College Station, Texas: Texas A&M University Press, 2002.
- Hershberg, James G. *Marigold: The Lost Chance for Peace in Vietnam.* Washington, D.C.: Woodrow Wilson Center Press, 2012.
- Hester, Hubert Inman. *Jewell is Her Name: A History of William Jewell College*. Liberty, Missouri: William Jewell College, 1967.
- Hill, Luther B. *A History of the State of Oklahoma*. Chicago: Lewis Publishing Company, 1910.
- Homan, Lynn M. and Thomas Reilly, *Black Knights: The Story of the Tuskegee Airmen*. Gretna, Louisiana: Pelican Publishing, 2001.
- Howe, George F. *Northwest Africa: Seizing the Initiative in the West.* Washington, D.C.: Office of the Chief of Military History, Department of the Army, 1957.
- Jablonsky, David. War by Land, Sea, and Air: Dwight Eisenhower and the Concept of Unified Command. Yale Library of Military History, 2010.
- Johnsen, Frederick A. *P-40 Warhawk*. Osceola, Wisconsin: MBI Publishing Company, 1998.
- Jones, Howard. *Crucible of Power: A History of U.S. Relations Since 1897.* Lanham, Maryland: SR Books, 2001.
- Joseph, Frank. Mussolini's War: Facist Italy's Miltary Struggles from Africa and Western Europe to the Mediterranean and Soviet Union 1935-45. West Midlands, England: Helion and Company, 2010.
- Kaplan, Fred M. *The Wizards of Armageddon*. Palo Alto, California: Stanford University Press, 1983.
- Kittfield, James. Prodigal Soldiers: How the Generation of Officers Born of Vietnam Revolutionized the American Style of War. Washington, D.C.: Brassey's, 1997.
- Knapp, H. S. *A History of the Pioneer and Modern Times of Ashland County.* Philadelphia: J. B. Lippincott & Co.,1863.
- Kohn, Richard H. and Joseph P. Harahan, ed. Air Superiority in World War II and Korea; An Interview with Gen. James Ferguson, Gen. Robert M. Lee,

- Gen. William Momyer, and Lt. Gen. Elwood R. Queseda. Washington, D.C.: Office of Air Force History, 1983.
- Kurowski, Franz. *Luftwaffe Aces: German Combat Pilots of World War II.* Mechanicsburg, Virginia: Stackpole Books, 2004.
- Lanning, Michael Lee and Dan Cragg. *Inside the VC and the NVA: The Real Story of North Vietnam's Armed Forces*. College Station, Texas: Texas A&M University Press, 2002.
- Lavalle, Major A.J.C. ed. *USAF Southeast Asia Monographs Volume I: The Tale of Two Bridges and the Battle for the Skies over North Vietnam.* Washington, D.C.: Office of Air Force History, 1985.
- Lee, Ulysses. *United States Army in World War II, Special Studies, The Employment of Negro Troops*. Washington, D.C.: United States Army Center of Military History, 1966.
- Lewis, Adrian R. *The American Culture of War: The History of U.S. Military Force form World War II to Operation Iraqi Freedom.* New York: Taylor and Francis Group, 2007.
- Mark, Eduard. Aerial Interdiction: Air Power and the Land Battle in Three American Wars. Washington, D.C.: Center for Air Force History, 1994.
- Masterson, V.V. *The Katy Railroad and the Last Frontier.* University of Missouri Press, 1988.
- Mattieli, Marco and Richard Caruana. 53 Stormo. Long Island City, New York: Osprey Publishing, 2010.
- Mitcham, Samuel W. and Friedrich Von Stauffenberg. *The Battle of Sicily: How the Allies Lost Their Chance for Total Victory.* Mechanicsburg, Pennsylvania: Stackpole Books, 2007.
- McFarland, Keith D. and David L. Roll, *Louis Johnson and the Arming of America*. Bloomington, Indiana: Indiana University Press, 2005.
- McGrath, John J. ed. An Army at War, Change in the Midst of Conflict: The Proceedings of the Combat Studies Institute, 2005 Military History Symposium. Fort Leavenworth, Kansas: Combat Studies Institute Press, 2005.
- McMaster, H. R. Dereliction of Duty: Lyndon Johnson, Robert McNamara, the Joint Chiefs of Staff, and the Lies that Led to Vietnam. New York: Harper Collins Publishers, Incorporated, 1997.
- Meilinger, Colonel Phillip S. *Airmen and Air Theory: A Review of the Sources*. Maxwell AFB, Alabama: Air University Press, 2001.
- Mets, David R. *Master of Airpower: General Carl A. Spaatz.* Presidio Press: Novato, California, 1988.
- Military History Institute of Vietnam. *Victory in Vietnam: The Official History of the People's Army of Vietnam, 1954-1975.* Translated by Merle L. Pribbenow. Lawarence, Kansas: University Press of Kansas, 2002.
- Molesworth, Carl. *P-40 Warhawk Aces of the MTO.* Minneapolis, Minnesota: Osprey Publishing, 2002.
- -----. *P-40 Warhawk vs. Bf 109: MTO 1942-44*. Minneapolis, Minnesota: Osprey Publishing, 2011.
- Momyer, General William W. *Airpower in Three Wars*. Maxwell Air Force Base, Alabama: Air University Press, 2003.
- Morison, Samuel Eliot. *History of United States Naval Operations in World War II, Sicily Salerno Anzio.* University of Illinois Press: Champaign, Illinois, 2002.

- Mortensen, Daniel R. A Pattern for Joint Operations: World War II Close Air Support in North Africa. Washington, DC: Office of Air Force History and US Army Center of Military History, 1987.
- -----. Airpower and Ground Armies: Essays on the Evolution of Anglo-American Air Doctrine 1940-43. Montgomery, Alabama: Air University Press, 1998.
- Moye, J. Todd. *Freedom Flyers: The Tuskegee Airmen of World War II.* New York: Oxford University Press, 2010.
- Murphy, Edward F. *The Hill Fights: The First Battle of Khe Sanh.* Novato, CA: Presidio Press, 2003.
- Nalty, Bernard C. *Air Power and the Fight for Khe Sanh.* Washington, D.C.: Office of Air Force History, 1986.
- -----. Strength for the Fight: A History of Black Americans in the Military. New York: Free Press, 1986.
- Olds, Robin with Christina Olds and Ed Rasimus, *Fighter Pilot: The Memoirs of Legendary Ace Robin Olds*. New York: St. Martin's Press, 2010.
- Olsen, John Andreas. *John Warden and the Renaissance of American Air Power* Washington, D.C.: Potomac Books, 2007.
- Orange, Vincent. Coningham: A Biography of Air Marshal Sir Arthur Coningham, KCB, KBE, DSO, MC, DFC, AFC. London: Methuen London, 1990.
- -----. *Tedder: Quietly in Command*. London and Portland: Frank Cass Publishers, 2004.
- Owen, Roderic. Tedder. London: Collins, 1952.
- Pape, Robert. *Bombing to Win: Air Power and Coercion in War.* Ithaca, New York: Cornell University Press, 1996.
- Patton, George S. War As I Knew It. New York: Houghton Mifflin, 1947.
- Pike, Douglas. *PAVN: People's Army of Vietnam.* Novato, California: Presidio Press, 1986.
- Playfair, Ian Stanley Ord. *The Mediterranean and Middle East Vol II.* Her Majesty's Stationery Office, 1956.
- Powaski, Ronald E. *March to Armageddon: The United States and the Nuclear Arms Race*, 1939 to the Present. New York: Oxford University Press, 1987.
- Prados, John. "The Road South: The Ho Chi Minh Trail," in *Rolling Thunder in a Gentle Land: The Vietnam War Revisited*, Andrew Wiest, ed. New York: Osprey Publishing, 2006.
- Puryear, Edgar F., Jr. George S. Brown, General, U.S. Air Force, Destined for Stars. Novato, California: Presidio Press, 1983.
- Randolph, Stephen. *Powerful and Brutal Weapons: Nixon, Kissinger, and the Easter Offensive.* Cambridge, Massachusetts: Harvard University Press, 2007.
- Record, Jeffrey. *The Wrong War: Why We Lost in Vietnam.* Annapolis, Maryland: Naval Institute Press, 1998.
- Reed, James E. *The Fighting 33rd Nomads in World War II*, Vol. 1. Memphis, Tennessee: Reed Publishers, 1987.
- -----. *The Fighting 33rd Nomads in World War II*, Vol. 2. Memphis, Tennessee: Reed Publishers, 1988.
- Rhodes, Richard. *The Making of the Atomic Bomb.* New York: Simon and Schuster, 1986.
- Rostow, Walt Whitman. *Concept and Controversy: Sixty Years of Taking Ideas to Market.* Austin, Texas: University of Texas Press, 2003.

- Rothrock, James. *Divided We Fall: How Disunity Leads to Defeat.* Bloomington, Indiana: AuthorHouse, 2006.
- Rush, Benjamin, *Essays, Literary, Moral and Philosophical.* Philadelphia: Thomas and William Bradford, 1806.
- Schlight, John. *The War in South Vietnam: The Years of the Offensive*, 1965-1968. Washington, D.C.: Air Force History and Museums Program, 1999.
- Sherwood, John Darrell. Fast Movers: America's Jet Pilots and the Vietnam Experience. New York: The Free Press, 1999.
- Shiner, Jason F. Foulois and the U.S. Army Air Corps. Washington, D.C.: Office of Air Force History, 1983.
- Shulimson, Jack. *U.S. Marines in Vietnam, An Expanding War, 1966.*Washington, D.C.: History and Museums Division, Headquarters, U.S. Marine Corps, 1982.
- Slife, James C. Creech Blue: Gen Bill Creech and the Reformation of the Tactical Air Forces, 1978-1984 (Maxwell Air Force Base, Alabama: AU Press, 2004).
- Smith, Charles R., ed. *U.S. Marines in the Korean War.* Washington, D.C.: History Division, United States Marine Corps, 2007.
- Sorley, Lewis. Westmoreland: The General Who Lost Vietnam. New York: Houghton Mifflin Harcourt, 2011.
- Spires, David N. Airpower for Patton's Army: The 19th Tactical Air Command in the Second World War. U.S. Government Printing Office: Washington, D.C., 2002.
- Steinhoff, Johannes. *Messerschmitts over Sicily: Diary of a Luftwaffe Fighter Commander*. Mechanicsburg, Pennsylvania: Stackpole Books, 2005.
- Stevens, Robert. Law School: Legal Education in America from the 1850s to the 1980s. Chapel Hill, North Carolina: University of North Carolina Press, 1983.
- Stout, Jay A. *The Men Who Killed the Luftwaffe: The U.S. Army Air Forces against Germany.* Mechanicsburg, Pennsylvania: Stackpole Books, 2010.
- Thompson, H. L. *New Zealanders with the Royal Air Force*, Vol. 3. Wellington: Historical Publications Branch, 1959.
- Thompson, Wayne. To Hanoi and Back: The United States Air Force and North Vietnam, 1966-1973. Washington, D.C.: Smithsonian Institution Press, 2000.
- Tilford, Earl H., Jr. Setup: What the Air Force Did in Vietnam and Why. Maxwell Air Force Base, Alabama: Air University Press, 1991.
- ----- *Crosswinds: The Air Force's Setup in Vietnam.* College Station, Texas: Texas A&M University Press, 1993.
- Tourison, Sedgwick D., Jr. translator. *B5-T8 in 48 QXD: The Secret Official History of the North Vietnamese Army of the Siege at Khe Sanh, Vietnam, Spring 1968.* Wauwatosa, Wisconsin, 2006.
- Trest, Warren A. *Air Force Roles and Missions: A History.* Washington, D.C.: Air Force History and Museums Program, 1998.
- ----- Air Commando: Heinie Aderholt and America's Secret Air Wars. Washington, D.C.: Smithsonian Institution Press, 2000.
- Union Historical Company. The *History of Marion County, Iowa.* Chicago: SJ Clarke Publishing Company, 1915.
- Van Doren, Charles Lincoln. Webster's Guide to American History. Encyclopedia Britannica, 1971.

- Van Staavern, Jacob. *Interdiction in Southern Laos*, 1960-1968. Washington, D.C.: Center for Air Force History, 1993.
- Von Skal, George. *History of German Immigration in the United States*. New York City: F.T. and J.C. Smiley, 1908.
- Westmoreland, General William C. *A Soldier Reports*. Garden City, New York: Doubleday and Co., 1976.
- Wilbanks, James H. *Abandoning Vietnam: How America Left and South Vietnam Lost Its War.* Lawrence: University Press of Kansas, 2004.
- Wilkins, Warren. *Grab Their Belts to Fight Them: The Viet Cong's Big-Unit War against the U.S.*, 1965-1966. Annapolis, Maryland: Naval Institute Press, 2011.
- Willmott, H. P. *The Battle of Leyte Gulf: The Last Fleet Action*. Bloomington, Indiana: Indiana University Press, 2005.
- Woodruff, Mark W. *Unheralded Victory: The Defeat of the Viet Cong and the North Vietnamese Army*, 1961-1973. Novato, California: Presidio Press, 2005.
- Worden, Mike. *Rise of the Fighter Generals, The Problem of Air Force Leadership:* 1945 1982. Maxwell Air Force Base, Alabama: Air University Press, 1998.
- Wright, John W., supervising editor, and W.A. Young, associate editor. *History of Marion County, Iowa, and Its People*. Chicago: SJ Clarke Publishing Company, 1915.
- Y'Blood, William T. *Hunter-Killer: U.S. Escort Carriers in the Battle of the Atlantic* Annapolis, Maryland: Naval Institute Press, 1983.
- Yelde, Harry. Fighting Patton: George S. Patton Jr. Through the Eyes of His Enemies. Minneapolis, Minnesota: Zenith Press, 2011.

# **Unpublished Papers**

- "Concept of Operations for Aerospace Operations Center." Langley Air Force Base, Virginia: Air Combat Command, Aerospace Command, Control, Intelligence, Surveillance, and Reconnaissance Center, 2001.
- Deptula, Brigadier General David. *Effects-Based Operations: Change in the Nature of Warfare*, Aerospace Education Foundation, Arlington, Virginia.
- Metz, Gary. Last of the Randolph Blues (unpublished book in author's possession).
- Momyer, Colonel William W. "A Concept of Tactical Air Operations." Thesis, Air War College, 1949.
- Momyer, Colonel William W. "Strategic Considerations in the Development of a NATO Air Strategy." Thesis, National War College, 1954.
- Mowbray, James A. Ph.D. "Proficimus More Iretenti: The Air War College at Fifty."
- "Survival in the Air Age," A Report by the President's Air Policy Commission, January 1, 1948.
- Ziemke, Caroline Frieda. "In the Shadow of the Giant: USAF Tactical Air Command in the Era of Strategic Bombing, 1945 1955." PhD diss., Ohio State University, 1989.

# **Articles / Reports**

- "1,884 Students To Get Degrees at U. of W." *Seattle Sunday Times*, June 13, 1937.
- "Ace War Flyer Was Ace Carrier for the Times" *Seattle Sunday Times*, June 13, 1943.
- "After Negro Hoodlums" Muskogee Daily Phoenix, July 23, 1904.
- "Air Corps Newsletter," The Office of the Chief of the Air Corps, September 15, 1937.
- "Air Corps Newsletter," The Office of the Chief of the Air Corps, February 1, 1938.
- "Air Corps Newsletter," The Office of the Chief of the Air Corps, March 1, 1938.
- "Air Corps Newsletter," The Office of the Chief of the Air Corps, March 16, 1938.
- "Air Corps Newsletter," The Office of the Chief of the Air Corps, April 15, 1938.
- "Air Corps Newsletter," The Office of the Chief of the Air Corps, June 1, 1938.
- "Air Corps Newsletter," The Office of the Chief of the Air Corps, October 1, 1938.
- "Air Corps Newsletter," The Office of the Chief of the Air Corps, November 15, 1938.
- "Air Corps Newsletter," The Office of the Chief of the Air Corps, February 15, 1939.
- "Air Corps Newsletter," The Office of the Chief of the Air Corps, March 1, 1939.
- "Air Corps Newsletter," The Office of the Chief of the Air Corps, July 15, 1940.
- "Air Corps Newsletter," The Office of the Chief of the Air Corps, August 15, 1940.
- "Air General Cites Need for Land War," New York Times, September 20, 1967.
- "Air Service News Letter," Information Division Air Service, July 10, 1923.
- "Air Service News Letter," Information Division Air Service, July 15, 1924.
- Apple, R.W., Jr., "Hanoi is Expected to get New MIG's," New York Times, January 15, 1967.
- "Army Air Service News Letter," Information Division Air Service, July 8, 1925.
- "Army Air Service News Letter," Information Division Air Service, January 19, 1926.
- "Army and Navy Air News" Aviation, January 2, 1922.
- "Army Going Out to Recruit Air Students," San Antonio Light, January 30, 1938.
- Associated Press. "U.S. Group in Tunisia Bags 13 Nazi Planes." *New York Times*, April 3, 1943.
- "Attleboro Spurs Record Airlift," Pacific Stars and Stripes, December 05, 1966.
- "Aviation Aides Set 500 Members as Initial Goal" *Muskogee Times Democrat*, February 26, 1925.
- "Bad Weather Halts Dare Devil Fliers" *Muskogee Times Democrat*, April 25, 1921.
- Becker, Dr. Peter W. "The Role of Synthetic Fuel in World War II Germany." *Air University Review*, July-August 1981.
- Biggins, Virginia. "Disosway Retires, Momyer Takes Over TAC," *Newport News Daily Press and Times-Herald*, supporting document in 4500th Air Base Wing History, K-WG-4500-HI, Jul-Dec 1968, IRIS No. 0461643, AFHRA.
- "Birth Announcement" Muskogee Times Democrat, September 24, 1915.
- Boyne, Walter J. "They Wanted Wings." Air Force Magazine, February 2009.
- "Cannon Air Force Base Makes Contribution to US Security," *Clovis News-Journal*, March 21, 1958.
- "Cannon Named for Aviation Pioneer," Clovis News-Journal, July 4, 1976.

- "Christmas Pageant at CAFB Chapel Tonight," *Clovis News-Journal*, December 18, 1955.
- "City Authorities After Delinquents" Muskogee Daily Phoenix, July 23, 1904.
- "City Locals" Muskogee Phoenix, April 11, 1906.
- "Civilian Area in Hanoi is Not Hit," *The Bonham Daily Favorite*, December 16, 1966.
- Clodfelter, Mark. "The Role of Airpower in Vietnam," Aerospace Power Journal, Summer 2001, Ricochets and Replies.
- "Col. H.H. Norman, Jr. Killed in Plane Crash," *Clovis News-Journal*, August 21, 1955.
- "Col. W.W. Momyer Takes CAFB Command," *Clovis News-Journal*, September 20, 1955.
- "Complete Election Results" Muskogee Daily Phoenix, April 5, 1906.
- Correll, John T. "The Vietnam War Almanac." *AIR FORCE Magazine*, September 2004.
- -----. "Disunity of Command." AIR FORCE Magazine, January 2005.
- -----. "Arc Light." AIR FORCE Magazine, January 2009.
- "Democratic Apathy, Republican Methods" *Muskogee Times Democrat*, April 3, 1907.
- "Democratic Candidate: The Standard Bearer in the Coming Election is from Old Missouri" *Muskogee Democrat*, July 6, 1904.
- "Democratic Convention" Muskogee Daily Phoenix, May 17, 1904.
- "Democratic Convention" Muskogee Daily Phoenix, July 6, 1904.
- "Democratic Rally Biggest Ever" Muskogee Times Democrat, March 31, 1906.
- "Democratic Recorder" Muskogee Daily Phoenix, July 13, 1904.
- "Democratic Ticket" Muskogee Democrat, July 7, 1904.
- "Democratic Ticket" Muskogee Times Democrat, April 2, 1906.
- Deptula, Major General David A., Colonel Gary L. Crowder, and Major George L. Stamper, Jr. "Direct Attack: Enhancing Counterland Doctrine and Joint Air-Ground Operations." *Air and Space Power Journal*, Winter 2003.
- Disosway, General G. P. "Tactical Air Command." *Air University Review*, September October 1967.
- Drew, Dennis M. "Insurgency and Counterinsurgency: American Military Dilemmas and Doctrinal Proposals," Air University Press, Maxwell Air Force Base, Alabama, March 1988.
- ----. "The Role of Airpower in Vietnam, " Aerospace Power Journal, Summer 2001, Ricochets and Replies.
- ----. *ROLLING THUNDER 1965: Anatomy of a Failure*. Maxwell Air Force Base, Alabama: Air University Press, 1986.
- "Editorial" Muskogee Daily Phoenix, July 10, 1904.
- "Election Results" The Unionist, April 6, 1905.
- "Engagement Announced," Clovis News-Journal, April 21, 1957.
- "Evans-Weber Rites are Held," San Antonio Express, February 12, 1939.
- Ferguson, Brigadier General James. "The Role of Tactical Air Forces." *The United States Air Force Air University Quarterly Review*, Summer 1954.
- "Fliers Given Royal Greeting in Oklahoma" *The Perry Journal*, September 19, 1924.
- "Flying Cadets Needed," The Entiat Times, February 3, 1938.
- Fogelman, General Ronald R. "Aerospace Doctrine: More than Just a Theory." *Airpower Journal*, Summer 1996.

- "French Airships Are Very Active" *Muskogee Times Democrat*, September 23, 1916.
- "Gassin' the Silver Zebras," Pacific Stars and Stripes, January 5, 1958.
- "Gen. Momyer Speaker For Pilot Graduates," *Clovis News-Journal*, April 1, 1956.
- "Gen. Timberlake Visits Clovis Air Force Base," *Clovis News-Journal*, February 29, 1956.
- "General Momyer Receives Fourth Star." Headquarters Seventh Air Force, News Release, 14 December 1967, K740.951-2, IRIS No. 00527896, AFHRA.
- "Goes to Jail for Bad Check" Reno Evening Gazette, September 27, 1933.
- Gordon, John, IV. "Joint Power Projection: OPERATION TORCH." *Joint Forces Quarterly*, Spring 1994.
- "Grand Lodge in Session" Muskogee Daily Phoenix, July 21, 1904.
- Head, William P. "War From Above the Clouds: B-52 Operations during the Second Indochina War and the Effects of the Air War on Theory and Doctrine," Fairchild Paper, Air University Press, Maxwell AFB, Alablama, July 2002.
- "In Social Circles" Muskogee Daily Phoenix, September 18, 1903.
- "In Social Circles" Muskogee Daily Phoenix, November 14, 1905.
- "It's 'Kill or Get Killed' In Africa, Says Col. Momyer," Seattle Times, April 14, 1943.
- Johnson, Wray R. "The Role of Airpower in Vietnam, " Aerospace Power Journal, Summer 2001, Ricochets and Replies.
- Kaiser, David. "Discussion, Not Negotiations," in *The Search for Peace in Vietnam*, 1964-1968, edited by Lloyd C. Gardener and Ted Gittinger.
- Kramer, Barry. "Pat Nugent Training for New Job in Vietnam," The Milwaukee Journal, August 13, 1968.
- Kuter, General Laurence S., USAF (Ret.). "Goddammit, Georgie!" *AIR FORCE Magazine*, February 1973.
- Lardner, John. "Germans No Sitting Birds Plenty Tough, Says Colonel Momyer," *Seattle Times*, April 12, 1943.
- -----. "American Flyer's Ingenuity Bests Foe's Superior Planes," *Seattle Times*, April 30, 1943.
- -----. "It's 'Aces' Up When Scoring American Victories in Air," *Seattle Daily Times*, June 29, 1943.
- "Lievre Will Drop 3,000 Feet in Air" Muskogee Times Democrat, July 7, 1920.
- "Lindbergh To Be At Muskogee Saturday" *The Standard Sentinel*, September 30, 1927.
- "Local Paragraphs" Muskogee Daily Phoenix, December 5, 1895.
- "Local Paragraphs" Muskogee Daily Phoenix, June 16, 1898.
- "Local Paragraphs" Muskogee Daily Phoenix, August 18, 1898.
- "Local Paragraphs" Muskogee Daily Phoenix, September 15, 1898.
- "Marriage Licenses," San Antonio Light, February 16, 1939.
- McArthur, George. "Air Strike Policies Can Be Frustrating." *The Register: Danville, Virginia*, October 8, 1967.
- McCutcheon, Lieutenant General Keith B., U.S. Marine Corps, "Marine Aviation in Vietnam, 1962-1970," *Proceedings*, May 1971.
- McFadden, Robert D. "Gen. William W. Momyer, Celebrated Pilot, Dies at 95." *New York Times*, September 3, 2012.

- "Momyer Assumes 7th Air Force Command." Headquarters Seventh Air Force News Release, 1 July 1966, K740.951-2, IRIS No. 00527834, AFHRA.
- Momyer, General William W. "Close Air Support in the USAF." *International Defense Review* 1/1974.
- "Momyer on the Job" Muskogee Times Democrat, February 2, 1913.
- "Momyer Uses Beach Field, Fools Nazis," Seattle Times, September 27, 1943.
- "Mr. Momyer Marries" Muskogee Times Democrat, June 22, 1906.
- "Mrs. Momyer President" Muskogee Times Democrat, April 20, 1915.
- "Muskogee Seeks to Become Flying Center" *The Ada Evening News*, April 25, 1922.
- "Negro Pilots Praised for Aerial Combat," *Lubbock Morning Avalanche*, June 25, 1943.
- "New Charters" Muskogee Times Democrat, November 20, 1912.
- Norgaard, Noland. "Sturdy U.S. Planes Saving Yank Airmen," *Joplin Globe*, January 24, 1943.
- Norris, Robert S., Thomas B. Cochran, and William M. Arkin, "History of the Nuclear Stockpile," *Bulletin of the Atomic Scientists*, August 1985.
- "Old Cong Stronghold Cracked by Attleboro," *Port Arthur News*, November 30, 1966.
- "Open Flying Field with Aerial Stunts" *Muskogee Times Democrat*, April 21, 1921.
- "Our Top Airman in Vietnam." The AIRMAN, May 1967.
- "Parachute Leap is Nearly Fatal" Muskogee Times Democrat, May 2, 1921.
- "Personal Mention" Muskogee Times Democrat, May 11, 1923.
- "Picking 40,000 Pilots a Year," Popular Science, July 1941.
- "Pilots Who Downed MIG's are Honored," New York Times, January 6, 1967.
- Powell, Hickman. "Pursuit Pilot," Popular Science, May 1941.
- -----. "Dog Fighting Is A Pursuit Pilot's Business," *Popular Mechanics*, June 1941.
- "President Eisenhower Sends His Best Wishes," *Clovis News-Journal*, January 9, 1957.
- Pribbenow, Merle. "The 'Ology War: Technology and Idealogy in the Vietnamese Defense of Hanoi, 1967," *The Journal of Military History*, Volume 67, Number 1, January 2003.
- "Purely Personal" Muskogee Daily Phoenix, August 29, 1901.
- Randal, Jonathan. "U.S. Planes Raid Hanoi Rail Yard and 2 MIG Fields," *New York Times*, April 25, 1967.
- "Received Sad News" Muskogee Times Democrat, December 16, 1908.
- "Rolling the Thunder." TIME, 29 December 1967.
- Roussel, Colonel Royal H. "The Air Force Doctrinal Manuals," *The United States Air Force Air University Quarterly Review*, Spring 1954.
- "Santa Claus Mail Box" Muskogee Times Democrat, November 14, 1922.
- "Says North Viet Has Replaced Serious MIG Fighter Losses," *Kokomo Tribune*, January 22, 1967.
- Scholin, Allan R. "Momyer and TAC: A Perfect Fit." *AIR FORCE Magazine*, July 1968.
- "Seattle High Schools Graduate 3,700" Seattle Daily Times, June 14, 1933.
- Sheean, Lieutenant Colonel Vincent. "Air Strategy Teamwork Wins Air Battles," *Seattle Times*, June 22, 1943.

- Small, Dorothy L. "Catapults Come of Age." *U.S. Naval Institute Proceedings*, October 1954.
- Smith, Colonel Dale O. and Major General John DeF. Barker. "Air Power Indivisible." *The United States Air Force Air University Quarterly Review*, Fall 1950.
- Smith, Hedrick. "U.S. Aides Oppose a Wider Air War," *New York Times*, January 8, 1967.
- -----. "U.S. Won't Strike at MIG Bases Now," *New York Times*, January 14, 1967.
- "Society and Clubs" Muskogee Times Democrat, November 27, 1917.
- Stambaugh, Jeffrey E. "JFACC: Key to Organizing Your Air Assets for Victory." *Parameters*, June 1994.
- Stevenson, Major General John D. "Exercise SAGEBRUSH." *The United States Air Force Air University Quarterly Review*, Fall 1956.
- "Street Beggars Must Go: Momyer Issues Orders" *Muskogee Democrat*, December 14, 1904.
- "Sum of the People," Enid Oklahoma Chronicle-Telegram, April 2, 1968.
- "Summer Theatre Rehearsal," Clovis News-Journal, July 6, 1956.
- "Tactical Air Command Observes 12th Anniversary," *Clovis News-Journal*, March 21, 1958.
- "Teaching at Wilburton" Muskogee Daily Phoenix, January 14, 1904.
- "The Course of Cold War." TIME, 5 January 1959.
- "They Are Gentlemen and All 'Lily White" Muskogee Democrat, April 5, 1905.
- "Tigers Worried While Planning Track Program" Seattle Daily Times, April 13, 1932.
- Tilford, Earl H. "The Role of Airpower in Vietnam, " Aerospace Power Journal, Summer 2001, Ricochets and Replies.
- "Tramps Must Leave or Go to Work on Streets" *Muskogee Democrat*, January 17, 1905.
- "Two Prospective Candidates" Muskogee Times-Democrat, November 20, 1906.
- "Two Victories at Con Thien," Chicago Sun-Times, 7 October 1967
- Tuohy, William. "McNamara Urges More Effective Use of Vietnam Troops," *Philadelphia Inquirer*, July 12, 1967.
- "U.S. Bombs Hit Within Hanoi Limits," The Morning Record, December 14, 1966.
- "US Command Denies Center of Hanoi Struck by Bombs," *Lodi News-Sentinel*, December 16, 1966.
- "U.S. Eyewitness Confirms Bombing Damage Considerable Inside Hanoi," *Lewiston Morning Tribune*, December 26, 1966.
- "U.S. Jets Strike in Record Raids in North Vietnam," *New York Times*, August 21, 1967.
- "Veteran Sings Over Radio" Salt Lake Tribune, July 13, 1927.
- Viccellio, Brigadier General Henry P. "Composite Air Strike Force." *The United States Air Force Air University Quarterly Review*, Winter 1956-57.
- "Wagoner Federal Court: New Members Admitted to Bar and Cases Disposed Of" *Muskogee Daily Phoenix*, November 27, 1902.
- "Watchman Murdered" Muskogee Daily Phoenix, June 13, 1908.
- "Waves of Bombers Pound Oil Depot, Truck Park 5 Miles South of Hanoi," *Gettysburg Times*, December 2, 1966.
- Webb, Williard J. "The Single Manager for Air in Vietnam." *Joint Forces Quarterly*, Winter 1993-94.

- White, General Thomas D. "USAF Doctrine and National Policy," *AIR FORCE Magazine*, January 1958.
- ----- "USAF's Ten Top Priorities," AIR FORCE Magazine, September 1960.
- "Will Fly Salute to Col. Momyer," *Clovis News-Journal*, September 22, 1955.
- "World Flyers to Pass Over Eufala" Indian Journal, September 11, 1924.

### **Historical Studies**

- "III DASC Operations," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 1 August 1969.
- Air Phase of the Italian Campaign to 1 January 1944. Army Air Forces Historical Study 15. Army Air Forces Historical Office: Washington, D.C., 1946.
- Air Phase of the North African Invasion. U.S. Air Force Historical Study 105.

  Assistant Chief of Air Staff, Intelligence, Historical Division, November 1944.
- "Air Response to the Tet Offensive, 30 January 29 February, 1968," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division.
- "Air War in the DMZ, September 1967 June 1968," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 1 August 1969.
- Anderson, Charles R. *Algeria-French Morocco: The United States Army Campaigns of World War II, CMH Pub 72-11*. Washington, D.C.: Army Center of Military History, 1993.
- "B5-T8 in 48 QXD, The Secret Official History of the North Vietnamese Army of the Siege at Khe Sanh, Vietnam, 1968." translated by Sedgwick D. Tourison, Jr., edited by Ray William Stubbe Wauwatosa, Wisconsin, 2006.
- Bald, Ralph D. Air Force Participation in Joint Amphibious Training Exercises, 1946-1950, USAF Historical Study 94. Maxwell AFB, Alabama: USAF Historical Division, Air University, 1954.
- -----. Air Force Participation in Joint Army Air Force Training Exercises, 1947-1950, USAF Historical Study 80. Maxwell AFB, AL: USAF Historical Division, Air University, 1955.
- Bower, Ray L. *The United States Air Force in Southeast Asia, Tactical Airlift.*Washington, D.C.: Office of Air Force History, United States Air Force, 1999.
- "Command and Control, 1966-1968," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 1 August 1969.
- "Control of Airstrikes in SEASIA: 1961-1966," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division.
- Cosmas, Graham A. *MACV: The Joint Command in the Years of Escalation, 1962-1967.* Washington, D.C.: Center of Military History, United States Army, 2006.
- "Definition of Operational Command and Operational Control," Historical Division, Joint Secretariat, Joint Chiefs of Staff, 30 April 1975.
- DTIC Technical Report, revised edition, U.S. Defense Logistics Agency A Study of Strategic Lessons Learned in Vietnam. Volume VI: Conduct of the War, Book 1: Operational Analysis Part 2 of 4: Chapter 3, May 9, 1980.
- Felny, Lieutenant General Hellmuth. "The German Air Force in the Mediterranean Theater of War," 1955, KH3.107-161, AFHRA.

- Hanek, Walter, ed. *Aces and Aerial Victories*. Washington, D.C.: Office of Air Force History, 1976.
- Haulman, Daniel L. "Tuskegee Airmen Chronology," Organizational History Branch, AFHRA, Aug 18, 2011.
- Hildreth, Charles H. "USAF Logistic Preparations for Limited War, 1958-1961," October 1962, USAF Historical Division Liaison Office.
- "Igloo White (Initial Phase)," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 31 July 1968.
- "Interdiction in SEASIA: November 1966 October 1968," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 30 June 1969.
- Joint Chiefs of Staff History of Vietnam War (II): 1965-67 Arc Light Market Time Game Warden 1966, 1 July 1970, Folder 03, Box 01, Joint Chiefs of Staff History of the Vietnam War, 1965-1967, The Vietnam Center and Archive, Texas Tech University.
- "Kham Duc," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 8 July 1968.
- "Khe Sanh (Operation Niagara), 22 January 31 March," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division.
- MacGarrigle, George L. *Taking the Offensive: October 1966 October 1967.*Washington, D.C.: Center of Military History, United States Army, 1998.
- "Operation Attleboro," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 14 April 1967.
- "Operation Hickory," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 24 July 1967.
- Participation of the Ninth and Twelfth Air Forces in the Sicily Campaign. Army Air Forces Historical Study 37. Army Air Forces Historical Office: Washington, D.C., 1945.
- Rogers, Lieutenant General Bernard William. *Vietnam Studies, Cedar Falls Junction City: A Turning Point*. Washington, D.C.: Department of the Army, 1989.
- "Rolling Thunder: July 1965 December 1966," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 15 July 1967
- "Rolling Thunder: January 1967 November 1968," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 1 October 1969.
- Rowley, Ralph. "FAC Operations, 1965 1970," Office of Air Force History, May 1975.
- ----. "The Air Force in Southeast Asia: Tactics and Techniques of Close Air Support Operations, 1961-1973," Office of Air Force History, February 1976.
- Salerno: American Operations from the Beach to the Volturno. Center of Military History Publication 100-7. United States Army Center of Military History: Washington, D.C., 1990.
- "Single Manager for Air in SVN," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 10 March 1969.
- Telfer, Major Gary L., Lieutenant Colonel Lane Rogers, and V. Keith Fleming, Jr. *U.S. Marines in Vietnam: Fighting the North Vietnamese, 1967.*Washington, D.C.: History and Museums Division, Headquarters, U.S. Marine Corps, 1984.

- "The History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and the War in Vietnam, 1960-1968, Part III" Historical Division, Joint Secretariat, Joint Chiefs of Staff, 1 July 1970.
- The Reduction of Pantelleria and Adjacent Islands. Army Air Forces Historical Study 52. Army Air Forces Historical Office: Washington, D.C., 1947.
- The Twelfth Air Force in the North African Winter Campaign: 11 November 1942 to the Reorganization of 18 February 1943. U.S. Air Force Historical Study 114. Army Air Forces Historical Office, January 1946.
- "The War in Vietnam, 1966," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 23 October 1967.
- "The War in Vietnam: January June 1967," HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, 29 April 1968.
- Tippett, David F., Major, USAF, "Operation Bolo: A Special Report," Corona Harvest, prepared by for Air Command and Staff College, Class 1971, K231.0371-30, IRIS #00917659, AFHRA.
- Tolson, Lieutenant General John J. *Vietnam Studies: Airmobility, 1961-1971.* Washington, D.C.: Department of the Army, 1989.
- "USAF Plans and Policies in South Vietnam and Laos, 1964." USAF Historical Division Liaison Office.
- Vallentiny, Captain Edward and Colonel P. Y. Williams. "B-52 Employment in Southeast Asia, 1965-1968, A Special Report," Aerospace Studies Institute, Air University, Maxwell Air Force Base, Alabama, July 1969, K239.0269-5, IRIS #1006865, AFHRA.
- Van Staavern, Jacob. "USAF Plans and Policies in South Vietnam, 1961-1963," USAF Historical Division Liaison Office, June 1965.
- -----. The United States Air Force in Southeast Asia: Interdiction in Southern Laos, 1960-1968. Center for Air Force History, 1993.
- -----. "USAF Plans and Operations, The Air Campaign Against North Vietnam, 1966," USAF Historical Division Liaison Office, January 1968.
- "WSEG Report, Air-to-Air Encounters in Southeast Asia, Volume II: F-105 Events Prior to March 1, 1967," Institute for Defense Analyses, Weapons Systems Evaluation Group, Arlington, VA, September 1968.

#### **Oral Histories**

- Anderson, Major General Norman J., U.S. Marine Corps (Retired), by Benis M. Frank, History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C., 1983.
- Austin, Major General Gordon H. by Hugh N. Ahmann, 18-20 May 1982, K239.0512-1325, IRIS No. 1058219, AFHRA.
- Barcus, Lieutenant General Glenn O. by Lieutenant Colonel John N. Dick, Jr., 10-13 August 1976, K239.0512-908, IRIS No. 01032024, AFHRA.
- Bishop, Brigadier General Cleo M. by Lt Col John N. Dick, Jr., 7-8 July 1976, K239.0512-904, IRIS No. 1026127, AFHRA.
- Blesse, Major General Frederick C. 14 February 1977, K239.0512-1077, IRIS No. 110496, AFHRA.
- Blood, Major General Gordon F. by Major S. E. Riddlebarger and Major R. B. Clement, 6 April 1970, K239.0512-257, IRIS No. 904161, AFHRA.
- Burns, Lieutenant General John J. by Hugh N. Ahmann, 5-8 June 1984, K239.0512-1587, IRIS No. 1085466, AFHRA.

- Catledge, Major General Richard. 30 September 1987, K239.0512-1768. IRIS No. 1095061, AFHRA.
- Chaisson, Major General John A. Historical Branch, G-3 Division, Headquarters, U.S. Marine Corps interview, 19 March 1969, Marine Corps History Division.
- Chaisson, Major General John A. by HQ SAC/HO, 19 September 1969, K239.0512-1597, IRIS No. 01080900, AFHRA.
- Creech, General Wilbur L. by Hugh N. Ahmann, June 1992, K239.0512-2050, IRIS No. 1114823, AFHRA.
- Cushman, General Robert E., Jr. U.S. Marine Corps (Retired). by Benis M. Frank, 1984, History and Museums Division, Headquarters, U.S. Marine Corps, Washington, D.C.
- Dean, Lieutenant General Fred M. by Major Richard H. Emmons, 25-26 February 1975, K239.0512-834, IRIS No. 01027517, AFHRA.
- Disosway, General Gabriel P. by Lieutenant Colonel John N. Dick, Jr., 4-6 October 1977, K239.0512-974, IRIS No. 1052916, AFHRA.
- Disosway, General Gabriel P. by Dr. Edgar F. Puryear, Jr., 17 January 1979, K239.0512-1401, IRIS No. 01053206, AFHRA.
- Dixon, General Robert J. by Captain Mark C. Cleary, 18-19 July 1984, K239.0512-1591, IRIS No. 1105139, AFHRA.
- Doyle, Lieutenant Colonel M. M. 16 February 1963, K239.0512-269, IRIS No. 0090485, AFHRA.
- Ellis, General Richard H. by Lieutenant Colonel Maurice Maryanow, 17 21 August 1987, K239.0512-1764, IRIS No. 1105347, AFHRA.
- Eubank, Major General Eugene L. by Hugh N. Ahmann, 30 June 1 July 1982, K239.0512-1345, IRIS No. 1052996, AFHRA.
- Everest, General Frank F. by Lieutenant Colonel John N. Dick, Jr., 23-25 August 1977, K239.0512-957, IRIS No. 1034248, AFHRA.
- Flynn, Lieutenant General John P. by Lt Col Arthur W. McCants, Jr., 28 Jan 1 Feb 1980, 20 21 February 1980, K239.0512-1187, IRIS #01104972, AFHRA.
- Futrell, Robert F. July 1995, K239.0512-2135, IRIS No. 00143651, AFHRA.
- Giraudo, Major General John C. by Lieutenant Colonel Charles M. Heltsley, 8-12 January 1985, K239.0512-1630, IRIS No. 1105191, AFHRA.
- Hartinger, General James V. by Captain Barry J. Anderson, 5-6 September 1985, K239.0512-1673, IRIS No. 01095193, AFHRA.
- Hildreth, Major General James R. by James C. Hasdorff, 27-28 October 1987, K239.0512-1772, AFHRA.
- Hovde, Colonel William. 19 January 1977, K239.0512-1062, IRIS No. 1031210, AFHRA.
- Hyland, Admiral John J., Jr., U. S. Navy (Retired), U.S. Naval Institute, Annapolis, Maryland, 1989.
- Johnson, Brigadier General Kenneth R. by Hugh N. Ahmann, 18 September 1988, K239.0512-1842, IRIS No. 1125014, AFHRA.
- Johnson, Admiral Roy L., USN (Ret.), U.S. Naval Institute, Annapolis, Maryland, 1980.
- Kuter, General Laurence S. by Hugh N. Ahmann and Tom Sturn, 30 September 3 October 1974, K239.0512-810, IRIS No. 01015373, AFHRA.
- Lee, General Robert M. by Lieutenant Colonel John N. Dick, Jr., 21-24 June 1977, K239.0512-950, IRIS No. 1104915, AFHRA.

- LeMay, General Curtis E. by Dr. Thomas G. Belden, 29 March 1972, K239.0512-591, IRIS No. 00904611, AFHRA.
- Lownds, Col. D. E. Transcript of Tape 3139, Debrief of, 015530, at Headquarters, FMFPAC, 29 July 1968, MHI, Quantico.
- Martin, Lieutenant General Glen W. by Lieutenant Colonel Vaughn H. Gallacher, K239.0512-982, IRIS No. 1028878, AFHRA.
- McCutcheon, Lieutenant General Keith B. USMC by Marine Corps Oral History Program, 22 April 1971, MCHI, Quantico, Virginia.
- Momyer, General William W. by Lt Col John N. Dick, 31 January 1977. K239.0512-1068, IRIS No. 1029788, AFHRA.
- Moore, Lieutenant General Joseph H. by Major Samuel E. Riddleburger and Lieutenant Colonel Valentino Castellino, 22 November 1969, K239.0512-244, IRIS No. 00904135, AFHRA.
- Meyers, Major General Gilbert L. by Major Richard B. Clement and Captain Ralph G. Swenston, 27 May 1970, p. 134, K239.0512-282, IRIS No. 00904200, AFHRA.
- Nazarro, General Joseph J. by Major Scott S. Thompson, 3-6 February 1980, K239.0512-1189, IRIS No. 1047757, AFHRA.
- Norris, Major General William C. by Hugh N. Ahmann, 29-30 November 1984, K239.0512-1618, IRIS No. 01114528, AFHRA.
- Olds, Brigadier General Robin. by Major Geffen and Major Folkman, K239.0512-051, AFHRA.
- Palmer, Lieutenant General Bruce, Jr. Exit Interview, Deputy CG, U.S. Army Vietnam, covering period 15 May 1967 16 June 1968, by Major Robert H. Lovelorn, Chief Historical Section, HQ, USARV, 7-10 June 1968, Open Circulation, Military History Institute, DS558.2.P34 1968 c. 2.
- Preston, General Maurice A., 13-15 September 1977, K239.0512-973, IRIS No. 1042066, AFHRA.
- Quesada, Lieutenant General Elwood R. by Lt Col Stephenson and Lt Col Long, US Army Military History Institute, 12 13 May 1975, K239.0512-838, IRIS No. 1037750, AFHRA.
- Robbins, Lieutenant General Jay T. by Dr. James C. Hasdorff, 24-25 July 1984, K239.0512-1593, IRIS No. 1064469, AFHRA.
- Schinz, Major General Albert W. by Dr. James C. Hasdorff, 20-22 April 1982, K239.0512-1320, IRIS No. 1049771, AFHRA.
- Seith, General Louis T. by Lt Col Arthur W. McCants, Jr., 27-28 October 1980, K239.0512-1236, IRIS No. 0110506, AFHRA.
- Sharp, Admiral U. S. Grant, U. S. Navy (Retired), by Commander Etta Belle Kitchen, U. S. Navy (Retired), 20 September 1969 7 June 1970.
- Smart, General Jacob E. by Lieutenant Colonel Arthur W. McCants and Dr. James C. Hasdorff, 27-30 November 1978, K239.0512-1108, IRIS No. 1041988, AFHRA.
- Smith, General William Y. by Hugh N. Ahmann, April 1990 April 1996, K239.0512-2040, IRIS No. 112046, AFHRA.
- Wade, General Horace M. by Mr. Hugh N. Ahmann, 10-12 October 1978, K239.0512-1105, IRIS No. 1040558, AFHRA.
- Walt, General Lewis W. by Dr. Robert R. Kritt, 20 April 1971, Colorado Springs, Colorado.
- Watkins, Major General James H., 27 28 November 1984, K239.0512-1616, IRIS No. 1040303, AFHRA.

- Westmoreland, General William C. by Major Paul L. Miles, Jr., Fort Myer Virginia, April 10, 1971, p. 1, Paul L. Miles Papers, Oral History with General Westmoreland, Box 1, Military History Institute, Carlisle Barracks, Pennsylvania.
- Westmoreland, General William C. by Dr. Robert R. Kritt, 9 August 1977, K239.0512-784, IRIS #01049779, AFHRA.
- Westmoreland, General William C. by Marine Corps Oral History Program, April 4, 1983, Marine Corps Historical Center, Washington Navy Yard, Washington, D.C., USMC History Division, Quantico.
- Wilson, Lieutenant General James W. by Mr. Hugh N. Ahmann, 26-27 March 1984, K239.0512-904, IRIS No. 1026127, AFHRA.

## **Electronic Sources**

- "A Nine-Year Record of the Courses of the National War College," 1953-54, https://digitalndulibrary.ndu.edu/cdm4/document.php?CISOROOT=/nwcarchpub&CISOPTR=2644&REC=2.
- Adams, Willi Paul. *The German Americans: An Ethnic Experience*, Indiana University-Purdue University Indianapolis, 1990, http://maxkade.iupui.edu/adams/chap1.html.
- Air Force Historical Research Agency. "Organizational History Branch, Squadrons and Flights." http://www.au.af.mil/au/afhra/rso/squadrons\_flights\_index.html, 58th, 59th, and 60th Fighter Squadrons (accessed 20 February 2007).
- Air Force Historical Research Agency, "Organizational History Branch, Wings and Groups,"

  http://afhra.maxwell.af.mil/rso/wings\_groups\_pages/0033og.asp
  (accessed 22 February 2007).
- Airlift / Tanker Association, "Hall of Fame," http://www.atalink.org/HallOfFame/Members/AR Pioneers.aspx.
- Ancestry.com. 1860 United States Federal Census [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2009.
- Ancestry.com. 1870 United States Federal Census [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2009.
- Ancestry.com. 1900 United States Federal Census [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2004.
- Ancestry.com. 1910 United States Federal Census [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2006.
- Ancestry.com. 1930 United States Federal Census [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2002.
- Ancestry.com. *Iowa State Census Collection, 1836-1925* [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2007.
- Ancestry.com. *Texas Marriage Collection*, 1814-1909 and 1966-2002 [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2005.
- Ancestry.com. U.S. National Homes for Disabled Volunteer Soldiers, 1866-1938 [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2007. Original data: Historical Register of National Homes for Disabled Volunteer Soldiers, 1866-1938; (National Archives Microfilm Publication M1749, 282 rolls); Records of the Department of Veterans Affairs, Record Group 15; National Archives, Washington, D.C.

- Capt Levi Chase Flight Log, December 1942, available from homepage.mac.com/techase/LRC/
- Catalog of F-105 Combat Losses, available from http://www.burrusspta.org/395\_Combat.pdf
- Church of Jesus Christ of Latter-day Saints, "International Genealogical Index,"FamilySearch (Online: Intellectual Reserve, Inc., 1999-2001), <a href="http://www.familysearch.org">http://www.familysearch.org</a>.
- Combat Chronology, U.S. Army Air Forces, Mediterranean Theater of Operations, available from http://www.milhist.net/usaaf/mto.html.
- President Eisenhower 1954 State of the Union Speech, available from http://www.eisenhower.archives.gov/all\_about\_ike/speeches/1954\_state\_of\_the\_union.pdf.
- "First Round the World Flight," National Museum of the Air Force, http://www.nationalmuseum.af.mil/factsheets/factsheet.asp?id=751.
- Muskogee Cemeteries Records.
  - http://www.usgennet.org/usa/ok/county/muskogee/cemeteries/greenhill/mnames.pdf.
- NSC 162,2, available from http://www.fas.org/irp/offdocs/nsc-hst/nsc-162-2.pdf.
- Olde Wythe History.
  - http://www.oldewythehistory.com/photo\_gallery/businessandplaces.php.
- On Demand Court Records. http://www1.odcr.com/detail.php?Case=051-MLI%203100309&County=051-.
- President's Daily Diary, December 23, 1967, LBJ Library, available from http://www.lbjlibrary.org/collections/daily-diary.html.
- President's Daily Diary, April 1, 1968, LBJ Library, available from http://www.lbjlibrary.org/collections/daily-diary.html.
- RAF 112 Squadron History. http://raf-112-squadron.org/raf\_112\_squadron\_photos\_1941.html.
- Rasimus, Ed. website post, http://yarchive.net/mil/vietnam\_air\_losses.html. "USS Chenango." NavSource Online.
  - http://www.navsource.org/archives/03/028.htm (accessed 20 February 2007).
- Voter Registration Lists, Public Record Filings, Historical Residential Records, and Other Household Database Listings, Ancestry.com. U.S. Public Records Index, Volume 2 [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2010.
- Waits, Wallace F., Jr. "Hatbox Field" Oklahoma Historical Society's Encyclopedia of Oklahoma History and Culture, http://digital.library.okstate.edu/encyclopedia/entries/H/HA052.html
- Washington State Digital Archives, Washington Marriage Record, http://media.digitalarchives.wa.gov/WA.Media/jpeg/F2BBCDA912EF7B C5C8248196CFF5ACE1\_1.jpg
- Yearbook, The National War College, Ninth Session 1954-55, https://digitalndulibrary.ndu.edu/cdm4/document.php?CISOROOT=/nwcarchpub&CISOPTR=494&REC=4.

# **Primary Sources**

- A Study Of Data Related To Viet Cong/North Vietnamese Army Logistics And Manpower, 29 August 1966, Folder 03, Box 05, Larry Berman Collection (Presidential Archives Research), The Vietnam Center and Archive, Texas Tech University.
- AAF Board Minutes, 21 October 1943 31 January 1944. 245.6051-2, IRIS No. 00156493, AFHRA.
- AAF Board Minutes, 1 May 30 June 1944. 245.6051-2, IRIS No. 00156495, AFHRA
- AAF Board Minutes, 1 Jul 1944 13 Jan 1945. 245.6051-2, IRIS No. 00156496, AFHRA.
- AAF Memorandum No. 20-20. Authority and Operation of the Army Air Forces Board and its Relationship to Headquarters, Army Air Forces. 10 December 1943, 245.602-1 Appendix B, IRIS No. 00156444, AFHRA.
- AAF Regulation No. 20-14. *Organization: AAF Center and AAF Board*, 1 June 1945, 245.606, IRIS No. 00156513, AFHRA.
- Ad Hoc Committee for TacAir Files, K168.15-43, AFHRA.
- Air Force Doctrine Document (AFDD) 1. Air Force Basic Doctrine, 17 November 2003.
- Air Force Doctrine Document (AFDD) 2. Operations and Organization, 27 June 2006.
- Air Force Doctrine Document (AFDD) 2-1. Air Warfare, 22 January 2003.
- Air Force Doctrine Document (AFDD) 2-1.1. Counterair Operations, 26 April 2002.
- Air Force Doctrine Document (AFDD) 2-1.2. Strategic Attack, 30 September 2003.
- Air Force Doctrine Document (AFDD) 2-1.3. *Counterland Operations*, 11 September 2006.
- Air Proving Ground Historical Data, 2 Sep 45 30 Jun 49. 240.01, IRIS No. 00155430, AFHRA.
- "Air University Special Studies Progress Report." Vol. 1. 1 April 1952, K239.04, IRIS No. 0479369, AFHRA.
- Barcus, Brigadier General G. O., Commanding General, HQ I Fighter Command. To Brigadier General Hume Peabody, Commanding General, AAF Tactical Center. Letter, 24 January 1944, 245.6051, IRIS No. 00156483, AFHRA.
- Barker, Major General John DeF. Papers. K237.1616, AFHRA.
- Blocher, Major Samuel J. "XII Air Support Command: Air Plan." 4 October 1942, 651.322, IRIS No. 00246, AFHRA.
- "Chronology of Restraints," Air Operations North Vietnam, 1965-1967, K143.5072-90, IRIS #1000962, AFHRA.
- CIA Memo: An Evaluation Of The Effects Of Bombing On Infiltration Into South Vietnam, 09 March 1967, III-12, Folder 08, Box 06, Larry Berman Collection (Presidential Archives Research), The Vietnam Center and Archive, Texas Tech University.
- Citation of 33rd Fighter Group, 7 February 1945. GP-33-SW-AW. IRIS No. 00079425. AFHRA.
- "Combat Beaver Briefing for CINCPAC," Msg to Gen Compton, USAF, from CINCPACAF (080520Z), 8 November 1966, K717.312-59, IRIS #01085704.

- Coningham, Air Marshal, Air Officer Commanding, Northwest Africa Tactical Air Force, "General Operational Directive, 20 February 1943," 614.201-2, AFHRA.
- Draft Memorandum From Secretary of Defense McNamara to President Johnson, Washington, November 1, 1967, Document 375, in Foreign Relations of the United States, 1964-1968 Volume V, Vietnam, 1967.
- Editorial Note, Document 164, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966.
- Effectiveness Of B-52 Operations, No Date, Folder 01, Box 06, Larry Berman Collection (Presidential Archives Research), The Vietnam Center and Archive, Texas Tech University.
- Field Manual No. 3-24 (FM 3-24). Counterinsurgency, 15 December 2006.
- General Wheeler, Chairman JCS, testimony to US Senate. *Air War Against North Vietnam: Hearings Before the Preparedness Investigating Subcommittee of Committee on Armed Services*. 90th Cong., 1st sess., Part 2, August 16, 1967.
- Headquarters XII ASC, Daily Intelligence Summary of Operations, 31 March 1943, 651.3071, IRIS No. 00246453, AFHRA.
- Headquarters XII ASC. Report on Operations, Pantelleria Campaign. 651.306-2, IRIS No. 00246450, AFHRA.
- Headquarters XII ASC. Report on Operations, Sicilian Campaign. 651.306-3, IRIS No. 00246451, AFHRA.
- Headquarters XII ASC. Report on Operations, Tunisia, 13 January 1943 9 April 1943. 651.3069-1. IRIS No. 00246452, AFHRA.
- Headquarters XII ASC, Report on Operations, Tunisian Campaign, 10 April to 13 May, 651.306-1, IRIS No. 00246449, AFHRA.
- Headquarters, Northwest African Tactical Air Force, "The Implications of the Present Situation," Memorandum, 17 April 1943, 614.316, IRIS No. 00242503, AFHRA.
- Headquarters, U.S. Army-North African Theater of Operations, General Orders No. 43 (June 26, 1943), Distinguished Service Cross Citation for Colonel (Air Corps) William Wallace Momyer, for actions March 31, 1943.
- Historical Branch, AC/S-2, Air Proving Ground Command. *AAF Board: Its Divisions and Their Work, 1943-1946*, Vol. 1-2. Eglin Field, Florida: Historical Branch, Air Proving Ground Command, 1946, 240.04-6, IRIS No. 00155453, AFHRA.
- History. 8th Fighter Bomber Wing, Jul 1954 Jun 1955, K-WG-8-HI. AFHRA. History. 33rd Fighter Group Medical, Jan 1941 Dec 1944, GP-33-HI (FI), AFHRA.
- History. 58th Fighter Squadron, Oct 1942 June 1944, SQ-FI-58-HI, AFHRA.
- History. 59th Fighter Squadron, Oct 1942 Dec 1943, SQ-FI-59-HI. AFHRA.
- History. 60th Fighter Squadron, Oct 1942 Dec 1943, SQ-FI-60-HI, AFHRA.
- History. 312th Fighter Bomber Wing, Jul 1955 Dec 1956, K-WG-312-HI, AFHRA.
- History. 314th Air Division, Jul 1955 Dec 1955, K-DIV-314-HI, AFHRA.
- History. 832d Air Division, Oct 1957 Jun 1971, K-DIV-832-HI, AFHRA.
- History. 4500th Air Base Wing, Jul 1968 Dec 1968, K-WG-4500-HI, AFHRA.
- History. Air University, Jul 1949 Dec 1951, 239.01, AFHRA.
- History. Air War College, Jul 1952 Jun 1953, K239.07B, AFHRA.
- History. Army Air Forces Board, 1946. 245.6-1, AFHRA.

- History. ATC, Jul 1964 Jun 1966, K220.01, AFHRA.
- History. ConAC, Dec 1948 Dec 1949, 417.01, AFHRA.
- History. DCS, Operations, Jul 1961 Dec 1961, K143.01, AFHRA.
- History. Philadelphia Air Defense Wing, 8 Dec 1941, WG-PHILA-HI, AFHRA.
- History. TAC, Mar 1946 Nov 1948, 417.01, AFHRA.
- History. TAC, Jul 1968 Oct 1974, K417.01, AFHRA.
- History. TAC, 1 July 1972 30 June 1973, Office of TAC History, Headquarters Tactical Air Command, Langley Air Force Base, Virginia, ACC History Office.
- HQ I Fighter Command, Special Order Number 145, IRIS No. 00056767, AFHRA.
- Johnson Library, Warnke Papers, John McNaughton Files, McNaughton VII.
  Top Secret; Sensitive (Department of State, EA/VN-Vietnam Working
  Group: Lot 72 D 219, JCS Working Papers, 1966–1967), as posted in
  Foreign Relations of the United States, 1964–1968, Volume IV, Vietnam,
  1966, Document 70
- Joint Publication 1-02. DoD Dictionary of Military and Associated Terms, 12 April 2001.
- Joint Publication 3-09.3. *Joint Tactics, Techniques, and Procedures for Close Air Support (CAS)*, 3 September 2003.
- Kenney, General George C. "Talk to the Air War College." 12 August 1949, K239.1613-16, IRIS No. 0481306, AFHRA.
- Letter from General Dixon to Lieutenant General Momyer, 8 December 1967, 168.7041-3, IRIS#01042242, AFHRA.
- Letter from Momyer to McConnell, 22 July 1967, in author's possession.
- MACV 206-02 Historians Background Material, (1966) Files, V A(4) Air, Record Group 472: Records of the U.S. Forces in Southeast Asia, National Archives, College Park, Maryland.
- Maj Gen Cannon to Commanding General, Northwest African Air Force, 18 September 1943, electronic copy in possession of author, AFHRA.
- Maj Gen House to Maj Gen Cannon, 16 September 1943, Subject: Combat Efficiency of the 99th Fighter Squadron, electronic copy in possession of author, AFHRA.
- Maj Gen James F. McKinney, Adjutant General, USA, to all Corps Area Commanders, et al., "General Headquarters Air Force," 21 December 1936, Supporting Document 15 in "History of Langley Field, 1 March 1935 to 7 December 1941."
- Memo: General Westmoreland's Concept for Initiation of Operation Tally Ho, 19 July 1966, Folder 02, Box 01, Ronald B. Frankum, Jr. Collection, The Vietnam Center and Archive, Texas Tech University.
- Memo from W. W. Rostow to President Lyndon B. Johnson–General Momyer's Briefing re: 'Operations in Route Package VIA', July 18, 1967, Folder 27, Box 01, Veteran Members of the 109th Quartermaster Company (Air Delivery) Collection, The Vietnam Center and Archive, Texas Tech University.
- Memo to President Lyndon B. Johnson from Tom Johnson: Meeting with Ken Crawford, July 20, 1967, Folder 09, Box 07, Larry Berman Collection (Presidential Archives Research), The Vietnam Center and Archive, Texas Tech University.

- Memo from W. W. Rostow to President Lyndon B. Johnson; Meeting with General Eisenhower, 10 August 1967, Folder 30, Box 01, Veteran Members of the 109th Quartermaster Company (Air Delivery) Collection, The Vietnam Center and Archive, Texas Tech University.
- Memo to Secretary McNamara From Harold Brown: Air War In Southeast Asia, March 21, 1968, Folder 05, Box 11, Larry Berman Collection (Presidential Archives Research), The Vietnam Center and Archive, Texas Tech University.
- Memorandum from the Joint Chiefs of Staff to Secretary of Defense McNamara, Document 101, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966.
- Memorandum from William N. Morrell, Jr., of the Central Intelligence Agency to the President's Special Assistant (Rostow), Document 157, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966.
- Memorandum for the Deputy Secretary of Defense, from Dr. Harold Brown, Secretary of the Air Force, Subject: The Value of Bombing North Vietnam, 10 November 1966, K168.024-9, IRIS #01114991, AFHRA.
- Memorandum for Wheeler from Westmoreland, 24 February 1968, William C. Westmoreland Collection, Box 53, Folder 22, MHI.
- Memorandum for Sharp, from Westmoreland, 26 February 1968, William C. Westmoreland Unclassified 1967-1968, COMUSMACV Correspondence, CMH.
- Memorandum for the Secretary of Defense, Subject: Operational Control of III MAF Aviation Assets, JCSM-237-68, 19 April 1968.
- Memorandum for the Record, Notes from Meeting with the President, Washington, October 23, 1968, Document 110, in Foreign Relations of the United States, 1964-1968 Volume VII, Vietnam, September 1968 January 1969.
- Message from CINCPACAF to 7th AF, 250045Z, 25 Oct 1966, 168.704-3 IRIS # 01042242, AFHRA.
- Message 230338Z, Admiral Sharp to General Wheeler, 23 December 1966, p.4, William C. Westmoreland Papers, Message File COMUSMACV, 1 Oct 31 Dec 1966, Center for Military History.
- Message from Momyer to Harris, 0553Z, 08 July 1966, K740.1623-5, AFHRA.
- Message from Momyer to Harris, 09 July 1966, K740.1623-5, AFHRA.
- Message from Wheeler to Westmoreland and Sharp, 111708Z, 11 November 1966, William C. Westmoreland Message File, COMUSMACV, 1 Oct 31 Dec 1966, William C. Westmoreland Papers, CMH.
- Message from Sharp to Wheeler, 242142Z, 24 December 1966, William C. Westmoreland Collection, Box 4 Folder 8, MHI.
- Message from 7AF TSN AB RVN to CINCPACAF, SUBJ: MIG Attrition and Harassment, 0414300Z May 1967, November 1970, IRIS No. 00874820, AFHRA.
- Message from Sharp to Wheeler and Westmoreland, 170744Z, 17 June 1967, William C. Westmoreland Collection, Box 5, Folder 10, MHI.
- Message from Sharp to Johnson and Ryan, 180028Z, 18 June 1967, William C. Westmoreland Collection, Box 5, Folder 10, MHI.
- Message from Sharp to Ryan, Johnson, and Westmoreland, 192000Z, 19 June 1967, William C. Westmoreland Collection, Box 5, Folder 10, MHI.

- Message from Wheeler to Sharp and Westmoreland, 032204Z, 04 August 1967, William C. Westmoreland Collection, Box 6, Folder 1, MHI.
- Message from Wheeler to Westmoreland, 102101Z, 10 August 1967, William C. Westmoreland Message File, COMUSMACV, 1 July -30 Sept 1967, CMH.
- Message from COMUSMACV to COMSEVENTHFLT and CG III MAF, 160518Z, 16 December 1967, AIR CONTROL (SPECAT VOL 1), December 1, 1967, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
- Message from Cushman to Krulak, 281502ZZ, 28 December 1967, AIR CONTROL (SPECAT VOL 1), December 1, 1967, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
- Message from Momyer to Westmoreland, 281145Z, 28 December 1967, AIR CONTROL (SPECAT VOL 1), December 1, 1967, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
- Message from General Westmoreland to Admiral Sharp and General Wheeler, AIR CONTROL (SPECAT VOL 1), January 1, 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
- Message from Westmoreland to Wheeler, MAC 11956, 10 December 1967, William C. Westmoreland, History File No 26, 26 Nov 16 Dec 67, CMH.
- Message from Wheeler to Westmoreland, JCS 00343, 11 January 1968, William C. Westmoreland Collection, Box 7, Folder 5, MHI, Carlisle Barracks.
- Message from Westmoreland to Wheeler and Sharp, MAC 00547, 12 January 1968, William C. Westmoreland Message File COMUSMACV, William C. Westmoreland Papers, Center for Military History.
- Message from Westmoreland to Momyer and Cushman, 121110Z, 12 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
- Message from Sharp to Wheeler, 142146Z, 15 January 1968, William C. Westmoreland Collection, Box 7, Folder 5, MHI, Carlisle Barracks.
- Message from Cushman to Krulak, 171402Z, 17 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
- Message from Krulak to Cushman, 172259Z, 17 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
- Message from Cushman to Westmoreland, 181352Z, 18 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
- Message from Cushman to Krulak, 182210Z, 18 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.

- Message from Cushman to Chapman, 190332Z, 19 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
- Message from Westmorland to Rosson and Weyand, MAC 00862, 19 January 1968, William C. Westmoreland Message File COMUSMACV, 1 Jan 31 Jan 1968, William C. Westmoreland Papers, CMH.
- Message from Krulak to Westmoreland, 200339Z, 20 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
- Message from Cushman to Westmoreland, 201630Z, 20 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
- Message from Westmoreland to Sharp, MAC 00992, 21 January 1968, William C. Westmoreland Message File COMUSMACV, 1 Jan 31 Jan 1968, William C. Westmoreland Papers, CMH.
- Message from Westmoreland to Sharp, MAC 01060, 23 January 1968, William C. Westmoreland Message File COMUSMACV, 1 Jan 31 Jan 1968, William C. Westmoreland Papers, CMH.
- Message from COMUSMACV to COMSEVENTHFLT, CG III MAF, CDR 7TH AF, 27 January 1968, AIR CONTROL (SPECAT VOL 1), 01 January 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
- Message from Westmoreland to Krulak, 280801Z, 28 January 1968, William C. Westmoreland Message File, COMUSMACV, 1 Jan 31 Jan 1968, William C. Westmoreland Papers, CMH.
- Message from Wheeler to Sharp and Westmoreland, 011526Z, 01 February 1968, William C. Westmoreland Message Files, COMUSMACV, 1 Feb 29 Feb 1968, William C. Westmoreland Papers, CMH.
- Message from Wheeler to Westmoreland, JCS 01320, 05 February 1968, William C. Westmoreland Message Files, COMUSMACV, 1 Feb 29 Feb 1968, William C. Westmoreland Papers, CMH.
- Message from Westmoreland to Sharp, 10 February 1968, William C. Westmoreland Message Files, COMUSMACV, 1 Feb 29 Feb 1968, CMH.
- Message from Cushman to Krulak, 180120Z, 18 February 1968, AIR CONTROL (SPECAT VOL 1), 01 February 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
- Message from Westmoreland to Sharp, MAC 02365, 19 February 1968, AIR CONTROL (SPECAT VOL 1), 01 February 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
- Message from Cushman to Westmoreland, 201416Z, 20 February 1968, AIR CONTROL (SPECAT VOL 1), 01 February 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
- Message from Krulak to Cushman, 202058Z, 20 February 1968, AIR CONTROL (SPECAT VOL 1), 01 February 1968, Folder 003, US Marine Corps

- History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
- Message from Krulak to Cushman, 210436Z, 21 February 1968, AIR CONTROL (SPECAT VOL 1), 01 February 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
- Message from Westmoreland to Cushman, 220427Z, 22 February 1968, AIR CONTROL (SPECAT VOL 1), 01 February 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
- Message from Westmoreland to Sharp, 271146Z, 27 February 1968, William C. Westmoreland Message Files, COMUSMACV, 1 Feb 29 Feb 1968, CMH.
- Message from General Krulak to General Cushman, February 28, 1968, AIR CONTROL (SPECAT VOL 1), February 1, 1968, Folder 003, US Marine Corps History Division Vietnam War Documents Collection, The Vietnam Center and Archive, Texas Tech University.
- Message from Momyer to Blood, 29 February 1968, Supporting Document #21 in HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, "Project CHECO Report: Single Manager for Air in SVN," March 10, 1969.
- Message from Sharp to Wheeler and Westmoreland, 030735Z, 03 March 1968, William C. Westmoreland Message File, COMUSMACV, 1 Mar 31 Mar 1968, CMH.
- Message from Westmoreland to Wheeler, MAC 6348, 15 May 1968, William C. Westmoreland Collection, Box 24, Folder 3, MHI.
- Message from Wheeler to Sharp and Westmoreland, JCS 05378, 17 May 1968, William C. Westmoreland Collection, Box 9, Folder 4, MHI.
- Momyer, Colonel W. W., Executive, AAF Board. To Colonel Henry Viccellio, Headquarters, AAF. Letter, 30 June 1945, 245.6051, IRIS No. 00156485, AFHRA.
- Momyer Comments on In-Country Air Strike Operations, Southeast Asia, 1 January 1965 – 31 March 1968, Corona Harvest, p. 10, 168.7041-120, AFHRA.
- Momyer, General William W. Letter to General Joseph J. Nazzaro, 1 October 1970, 168.7041-33, IRIS #1001145, General William Momyer Papers, AFHRA.
- Momyer, General William W. "Observations of the Vietnam War, July 1966 July 1968." November 1970, K740.151, IRIS No. 00524451, AFHRA.
- Momyer, General William W. "What Happened to the VNAF? An Analysis," 22 May 1975, 168.7041-157, IRIS No. 1028275, from General Momyer Papers, AFHRA.
- Momyer, General William W. to Brigadier General John E. Ralph, Memorandum, Subject: Validation of Close Air Support (CAS) Phase II Results, 9 January 1975, 168.7041-131, IRIS No. 1028249, from General Momyer papers, AFHRA.
- Momyer, General William W. to General Ellis, Memorandum, Subject: Corona Harvest (In-Country Air Strike Operations, Southeast Asia, 1 January 1965 31 March 1968), 1 July 1974, 168.7041-120, IRIS No. 1028238, from General Momyer papers, AFHRA.

- Momyer, General William W. comments on In-Country Air Strike Operations, Southeast Asia, 1 January 1965 31 March 1968, 168.7041-120, AFHRA.
- Momyer letter to Major General Robert Ginsburgh, Chief, Office of Air Force History, 23 May 1972, 168.7041-52, IRIS #1001164, AFHRA.
- Momyer Memorandum for Record, 18 January 1968, Supporting Document #1 in HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, "Project CHECO Report: Single Manager for Air in SVN," March 10, 1969.
- Momyer Memorandum for Record, 22 February 1968, Supporting Document #18 in HQ PACAF, Directorate, Tactical Evaluation, CHECO Division, "Project CHECO Report: Single Manager for Air in SVN," March 10, 1969.
- Notes from Meeting, Washington, August 24, 1967, 5:33–6:25 p.m, Document 294, in Foreign Relations of the United States, 1964-1968 Volume V, Vietnam, 1967.
- Notes on Meeting with Foreign Policy Advisers, Washington, October 23, 1968, Document 111, in Foreign Relations of the United States, 1964-1968 Volume VII, Vietnam, September 1968 January 1969.
- "Operations, Seventh Air Force In-Country Tactical Air Operations," 7AF Pamphlet N. 55-1, Headquarters Seventh Air Force, 20 March 1968.
- Pentagon Papers, Gravel Edition, Air War in the North: 1965-1968, Volume 1.
- Pentagon Papers, Gravel Edition, Air War in the North: 1965-1968, Volume 2.
- Personnel Roster, Army Air Forces Board. 1 November 1943 1 July 1944, 245.6041, IRIS No. 00156479, AFHRA.
- Pham Thi Vinh, ed., Van Kien Dang Toan Tap, Tap 26, 1965 [Collected Party Documents, Volume 26, 1965] (Hanoi: National Political Publishing House, 2003), Translated for CWIHP by Merle Pribbenow.
- Record of COMUSMACV FONECON, Westmoreland and Momyer, 10 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.
- Record of COMUSMACV FONECON, Westmoreland and Momyer, 12 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.
- Record of COMUSMACV FONECON, Westmoreland and Momyer, 15 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.
- Record of COMUSMACV FONECON, Westmoreland and Momyer, 16 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.
- Record of COMUSMACV FONECON, Westmoreland and Momyer, 17 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.
- Record of COMUSMACV FONECON, Westmoreland and Momyer, 18 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.
- Record of COMUSMACV FONECON, Westmoreland and Momyer, 20 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.
- Record of COMUSMACV FONECON, Westmoreland and Momyer, 21 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.

- Record of COMUSMACV FONECON, Westmoreland and Momyer, 22 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.
- Record of COMUSMACV FONECON, Westmoreland and Momyer, 26 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.
- Record of COMUSMACV FONECON, Westmoreland and Momyer, 27 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.
- Record of COMUSMACV FONECON, Westmoreland and Momyer, 29 February 1968, William C. Westmoreland, COMUSMACV FONECONS, February 1968, William C. Westmoreland Papers, CMH.
- Record of COMUSMACV FONECON, Westmoreland and Momyer, 2 March 1968, William C. Westmoreland, COMUSMACV FONECONS, March 1968, William C. Westmoreland Papers, CMH.
- Record of COMUSMACV FONECON, Westmoreland and Momyer, 4 March 1968, William C. Westmoreland, COMUSMACV FONECONS, March 1968, William C. Westmoreland Papers, CMH.
- Record of COMUSMACV FONECON, Westmoreland and Momyer, 9 March 1968, William C. Westmoreland, COMUSMACV FONECONS, March 1968, William C. Westmoreland Papers, CMH.
- Record of COMUSMACV FONECON, Westmoreland and Momyer, 30 April 1968, William C. Westmoreland, COMUSMACV FONECONS, April 1968, William C. Westmoreland Papers, CMH.
- Record of COMUSMACV FONECON, Westmoreland and Momyer, 8 May 1968, William C. Westmoreland, COMUSMACV FONECONS, May1968, William C. Westmoreland Papers, CMH.
- Record of COMUSMACV FONECON, Westmoreland and Momyer, 12 May 1968, William C. Westmoreland, COMUSMACV FONECONS, May1968, William C. Westmoreland Papers, CMH.
- Report of the Army Air Forces Board. "Isolation of the Battlefield." Project No. 3763A373.1, 17 October 1944, 1-2, MICFILM 28222, IRIS No. 205-3567, AFHRA.
- Report of the Statistical Control Division, Office of Management Control, 30 March 1944, "Operations of the 99th Fighter Squadron Compared with Other P-40 Squadrons in MTO, 3 July 1943 31 January 1944," 134.65-496, IRIS No. 00112858, AFHRA.
- Secretary of Defense Robert McNamara, testimony to US Senate. *Air War Against North Vietnam: Hearings Before the Preparedness Investigating Subcommittee of Committee on Armed Services*. 90<sup>th</sup> Cong., 1<sup>st</sup> sess., Part 4, August 25, 1967.
- "Seventh Air Force Chronology, 1966," K740.052-3, Jan-Dec 1966, AFHRA.
- Special Vietnam Oral History Project, Transcript of Recorded 'Brainstorming' Session, 20 April 1971, with General Davis, Lieutenant General Buse, Van Ryzin, and Wieseman, Major General Simpson, Colonel Caldwell, and Messrs. Shaw and Frank.
- Summary Notes of the 559th Meeting of the National Security Council, June 17, 1966, Document 159, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966.

- Summary Notes of the 565th Meeting of the National Security Council, October 15, 1966, Document 272, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966.
- Tactical Air Command. "Tactical Air Operations," Staff study presented to the Review Board, 21 June 1949, Policy Statements, K168.15-43, IRIS No. 0472914, AFHRA.
- Tactical Air Command Manual 2-1. Tactical Air Operations, 1978.
- "Tactical Air Operations: Proposed Article by General Momyer for AWC Chapter on General Purpose Forces," June 1970, 168.7041-29, from General Momyer Papers, AFHRA.
- Tactical Air Support Requirements Board. Files. K168.15-80, AFHRA.
- Telegram From the Embassy in Vietnam to the Department of State, Document 322, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966.
- Telegram From the Department of State to the Embassy in Poland, Document 329, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966.
- Telegram From the Department of State to the Embassy in Poland, Document 331, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966.
- Telegram From the Embassy in Poland to the Department of State, Document 332, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966.
- Telegram From the Embassy in Poland to the Department of State, Document 342, in Foreign Relations of the United States, 1964-1968 Volume IV, Vietnam, 1966.
- Telephone Conversation Between President Johnson and Senator Richard Russell, Washington, October 26, 1968, Document 125, in Foreign Relations of the United States, 1964-1968 Volume VII, Vietnam, September 1968 – January 1969.
- Thursday, 14 December, William C. Westmoreland History File No 26, 26 Nov 16 Dec 67, CMH.
- Transcript of Telephone Conversation Among President Johnson, Vice President Humphrey, Richard Nixon, and George Wallace, October 31, 1968, Document 166, in Foreign Relations of the United States, 1964-1968 Volume VII, Vietnam, September 1968 January 1969.
- United States Department of State / Foreign relations of the United States diplomatic papers, 1941. The British Commonwealth; the Near East and Africa (1941).
- US Senate. Air War Against North Vietnam: Hearings Before the Preparedness Investigating Subcommittee of Committee on Armed Services. 90th Cong., 1st sess.,1967.
- US Senate, Committee on Armed Services. Close Air Support: Hearings before the Special Subcommittee on Close Air Support of the Preparedness Investigating Subcommittee of Committee on Armed Services. 92nd Cong., 1st sess., October, November 1971.
- Video Recording No. 342-USAF-40988; "600th Photo Squadron Cameramen in Action, Tan Son Nhut Air Base" July 30 August 1, 1966; Records of the

- U.S. Air Force, Record Group 342; National Archives at College Park, College Park, MD.
- War Department Field Manual 100-20. Command and Employment of Air Power, 21 July 1943.
- Warwick, H. S. "XII Air Support Command in the Tunisian Campaign." 655.01-2, IRIS No. 00246459, AFHRA.
- Westmoreland Interview File, March 6, 1971, Paul L. Miles Papers, Box 1, Army Military History Institute.
- William C. Westmoreland Papers, Folder #7, History Files: 29 May -16 Jul 1966, Center of Military History.
- William C. Westmoreland, Message File COMUSMACV, 1 Jul 30 Sept 1966, Message MAC6014, Westmoreland to Sharp, 16 July 1966, Westmoreland Papers, Center for Military History.
- William C. Westmoreland Collection, Box 4, Folder 1, Official Correspondence COMUSMACV Back Channel, Eyes Only Message File, Message CINCPAC 180348Z, Sharp to Westmoreland, 18 July 1966, Military History Institute.
- William C. Westmoreland, History File No. 8, 17 Jul 17 Sep 1966, Message MAC6148, Westmoreland to Sharp, 19 July 1966, Westmoreland Papers, Center for Military History.
- William C. Westmoreland, History File No. 8, 17 Jul 17 Sept 1966, General Westmoreland's Historical Briefing, 24 July 1966, 5-6, Westmoreland Papers, Center for Military History.
- W. W. Rostow to President Lyndon B. Johnson; Meeting with General Momyer, March 28, 1968, Folder 15, Box 03, Veteran Members of the 109th Quartermaster Company (Air Delivery) Collection, The Vietnam Center and Archive, Texas Tech University.
- W. W. Rostow to President Lyndon B. Johnson; Meeting with General Momyer, April 1, 1968, Folder 15, Box 03, Veteran Members of the 109th Quartermaster Company (Air Delivery) Collection, The Vietnam Center and Archive, Texas Tech University.